

ILFORD URBAN DISTRICT COUNCIL.

MAP SHOWING INCIDENCE OF CERTAIN INFECTIOUS DISEASES
DURING THE YEAR 1904.

ILFORD URBAN DISTRICT.

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1904.

C. F. STOVIN, M.A., D.P.H.,

Medical Officer of Health,

and Medical Superintendent Isolation Hospital.

ILFORD :

SOUTH ESSEX RECORDERS, LTD., High Road.

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PREFACE.

To the Chairman and Members of the
ILFORD URBAN DISTRICT COUNCIL.

GENTLEMEN,

Every Medical Officer of Health appointed under an order of the Local Government Board is required to make an Annual Report with regard to the Sanitary District which is under his superintendence.

Accordingly, I herewith beg to present my Annual Report for the year 1904.

To the mid-year 1904, I estimate the total population as 59,700; or, excluding the Public Institutions, 54,120. In a rapidly growing neighbourhood like Ilford, it is most difficult to estimate the population accurately. This estimate is based on the number of inhabited houses, and is explained on page 18. In making this estimate the Accountant was good enough to give me the number of empty houses on the rate-book, and I then allowed 25 per cent. more, for possible errors, so as to be on the safe side; and I believe the above estimate is as correct as it is possible to get it.

The death-rate for the district for the year was 10.4; or correcting it for the age and sex distribution of the district, so as to compare it with other districts in the country, gives a corrected death-rate of 11.2.

The birth-rate works out at 28.6.

During the year the two most important events, as regards the outbreak of disease, were the prevalence of Diphtheria in June, and of Infantile Mortality in July and August.

A special report on each of these occurrences is embodied in this report.

With regard to the Infant Mortality, I believe the remedy in Ilford to be largely educational; and, therefore, I strongly urge the appointment of a Female Sanitary Inspector or Health Visitor. The death-rate for this district would have been very low this year if it had not been for the deaths of infants, under one year in the summer, and some effort should be made to cope with this recurring sweeping off of the infant population. In Ilford the death-rate ought not to exceed 100 deaths under one year, per 1,000 births; and I believe this could be achieved, except under very exceptional circumstances—such as a very hot, dry summer. The factors in the problem, of course, are many; but no good can be accomplished, except by steadily directed effort in this connection all the year round.

The River Roding has attracted considerable attention during the year. In the earlier part of the summer a great nuisance was caused to part of the district by a most offensive smell coming from the direction of the Wanstead Sewage Works, when the wind was blowing from that direction. It generally occurred in the evening, and appeared to have nothing to do with the Wanstead sewage effluent.

By the courtesy of the Wanstead Council, a deputation of the Ilford Council met a deputation of the Wanstead Council and were shown over the sewage works of the latter.

They were making certain alterations, and since then there has been little to complain of in that direction. This matter must be kept quite distinct from the condition of the river itself.

I have appended a spot map of the occurrence of infectious diseases in the various portions of the district during the past year. The spots are not too numerous; and, I think, clearly indicate the incidence of these diseases.

Measles ceased to be a notifiable disease under the Act in the early part of 1904. During the past year this disease has been very prevalent, so much so that many people seemed to think that the exclusion of Measles from the schedule of the Infectious Diseases (Notification) Act was a most unwise step, and the prevalence of the disease was the result of this exclusion.

The matter is dealt with in the body of this report on Measles. At the same time it must not be forgotten that mere notification is useless, unless it can be followed up by sufficient preventive measures; and also too, that the Council now has a system of notification through the school agency for nothing; whereas before, the other system of notification cost the town getting on for £100 a year. The comparative merits and defects of the two schemes are pointed out in the body of this report.

This year I have included for the first time a short section on Schools, in this report.

The extension of the Outfall Works has been progressing through the past year, and only requires the completion of the contact beds to render it possible to judge of the success of the scheme in dealing with the sewage of the district, satisfactorily.

The question of the provision of a refuse destructor has received attention during the year, and is still under the consideration of the Council.

Finally, I should like to express my thanks to the Public Health Committee for its support during the past year, and my indebtedness to the various Officials of the Council for their assistance in many ways.

I am, Gentlemen,
Your Obedient Servant,
C. F. STOVIN, M.A., D.P.H.,
Medical Officer of Health.



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PHYSICAL AND GEOLOGICAL FEATURES.

The surface generally is gently undulating. Flatter in the southern and more thickly inhabited portion, but rising to a higher elevation in the more northern part. Ilford is situated on the London Clay, but this only comes to the surface as a narrow strip running almost due East and West through the middle of the district. In addition, there is a large patch to the North-West, as exemplified in the names Clayhall and Claybury.

There is a large square area of brick-earth lying roughly in the angle between the junction of the Romford Road with the Ilford Lane, extending down the Romford road nearly as far as St. Mary's Church, and down Ilford Lane nearly to Uphall Farm.

The rest of the subsoil is gravel.



SECTION I.

Vital Statistics.

STATISTICAL SUMMARY.

Enumerated Population at Census, 1901	41,229
Estimated ,, ,, middle of 1902	49,000
,, ,, ,, 1903	54,226
,, ,, ,, 1904	59,700
Area of District in Statute Acres—Land	8,470
,, ,, ,, Inland Water ...	26
,, ,, ,, Tidal ,, ...	7
Density of Population, <i>i.e.</i> , No. of Persons per acre	7.0
Average No. of Persons per acre in 33 great towns	32.4
Total number of births registered in 1904	1,548
Representing a birth-rate of	28.6
Total number of births registered in 1903	1,522
Representing a birth-rate of	30.6
Total number of births registered in 1902	1,334
Representing a birth-rate of	29.9
Total number of births registered in 1901	1,194
Representing a birth-rate of	30.5
Average birthrate of 33 great towns	29.2
Number of deaths registered in 1904	563
Representing a nett death-rate of	10.4
Number of deaths registered in 1903	498
Representing a nett death-rate of	10.0
Number of deaths registered in 1902	415
Representing a nett death-rate of	9.3
Number of deaths registered in 1901	434
Representing a nett death-rate of	11.1
Deaths from the 7 principal Zymotic diseases in 1904	120
Representing a Zymotic death-rate of ...	2.2
Deaths from the 7 principal Zymotic diseases in 1903	66
Representing a Zymotic death-rate of ...	1.3
Deaths from the 7 principal Zymotic diseases in 1902	47
Representing a Zymotic death-rate of ...	1.05
Deaths from the 7 principal Zymotic diseases in 1901	99
Representing a Zymotic death-rate of ...	2.6

Infantile mortality rate for 1904	...	...	...	...	127
„ „ „ 1903	...	...	...	...	92.6
„ „ „ 1902	...	...	...	...	74.2
„ „ „ 1901	...	...	...	...	156.5
Rateable Value	...	...	...	...	£333,470
Number of inhabited houses, 1904	...	...	...	...	11,045
„ „ „ 1903	...	...	...	...	10,132
„ „ „ 1902	...	...	...	...	9,088
„ „ „ 1901	...	...	...	...	7,649

POPULATION.

I estimate the total population for 1904 at 59,700, deducting from this total :—

Dr. Barnardo's Homes	1,000
Claybury Asylum	2,660
West Ham Asylum	920

Total 4,580

leaves a nett population for the district proper of 54,120.

It is arrived at thus :—

Total number of houses in district	12,411
Total number of inhabited houses	11,045
Total number of uninhabited houses	1,366

For the Wards in the census of 1901 the population was :—

No. of inhabited houses.	Estimated Population.
3,691	18,287 in the Central Ward.
2,708	13,238 „ South Ward.
1,250 (including Institutions)	9,709 „ Hainault Ward.
<u>7,649</u>	<u>41,234</u>

At the census in 1901 there were :—

No. of inhabited houses	7,649
No. of uninhabited houses	721

Total number of houses... 8,370

Since then certificates granted for new houses from March, 1901, to June, 1902 ...	1,545
Certificates do. from June, 1902 to 1903	1,226
Certificates do. from June, 1903 to 1904	1,270
Making the present total...	12,411

The census gives 4.9 persons per house for Ilford, so by multiplying the number of inhabited houses by 4.9 gives the population I have taken above. There are two possible sources of error in this estimate.

(1) That 4.9 persons per house does not represent Ilford at the present time. The tendency is in all these suburban districts for the number of persons per house to increase, so that, this error, if present, under-estimates rather than over-estimates the population.

In Walthamstow at the census, persons per house ...	5.8
„ East Ham do. do. ...	5.6
„ Romford do. do. ...	4.8

(2) The second source of error is that the number of empty houses may be under-estimated. This error has been carefully guarded against in counting them, and moreover allowance has been made in addition for possible errors. So that I have adopted the figures given by this means rather than the Registrar General's method. In a rapidly growing neighbourhood like this it seems to me this is more likely to be the correct one if carefully carried out. Also, too, it must be remembered that the Registrar General's estimate is based on the ratio of increase during the ten years between the last two census years. Now, although the increase of Ilford was phenomenal during those ten years, the first four years showed comparatively but slight increase, and the real increase came during the last six years, so that is another reason, I think, why this estimate is more likely to be the correct one.

The Registrar General's estimate is 51,225.

BIRTHS.

The number of Births registered during the year was 1,548, giving a rate of 28.6.

The Birth-rate in East Ham was 31.7 for 1904.

„	„	Leyton	„	30.7	„
„	„	Walthamstow	„	32.7	„
„	„	Hornsey	„	20.4	„

On examining Table 1, it will be seen how low this rate was for the earlier periods, from 1893 to about 1898, which is due to the population being too high as given in column 2 for those particular years, thus bringing the birth rate too low.

DEATHS.

The total number of deaths registered for 1904, was 933

The number of deaths registered for the year 1904,
for the district proper is 563

These include deaths in :—

Romford Infirmary	24
Ilford Isolation Hospital	13
Doncaster Railway Station.....	1
Brentwood Asylum.....	4
All belonging to the district proper.	42

This gives a death rate of 10.4 for the year 1904 for the district proper.

The death rate was 10.0 for the year 1903.

Do.	9.3	do.	1902.
Do.	11.1	do.	1901.

Of non-residents dying in institutions in the district :—

Claybury Asylum.....	196
West Ham Asylum.....	161
Dr. Barnardo's Homes	13

Total 370

The death-rate for East Ham was 13.5 for 1904.

Do.	Walthamstow	11.9	do.
Do.	Hornsey	8.4	do.

Correcting this death rate for age and sex distribution to compare it on equal terms with other towns in the country gives a corrected death rate for :—

Ilford	11.2	for 1904.
East Ham	14.4	do.
Leyton	13.1	do.
Walthamstow	17.7	do.
Hornsey.....	9.6	do.

ZYMOTIC DEATH RATE.—The number of deaths registered from the seven principal zymotic diseases for the year 1904 was 120, giving a zymotic death rate of 2.2 per 1,000.

The seven diseases are :—

Small Pox.....	—
Measles.....	17
Scarlet Fever	5
Whooping Cough	8
Diphtheria	10
Typhoid Fever.....	4
Diarrhœa (epidemic)	76

Total... 120

For 1903 this rate was 1.3 for Ilford.

„	1902	„	„	„	1.05	„	„
„	1901	„	„	„	2.6	„	„

For 1904 this rate was 1.94 for England and Wales.

„	„	„	„	„	2.49	„	76 large towns.
„	„	„	„	„	2.02	„	142 smaller towns.

MORTALITY IN AGE GROUPS.—On referring to the table at the end of this section it will be seen that there were 100 deaths of persons over 65 years of age, 198 under one year of age, and 130 at ages from 25 to 65.

In 1903, 108 deaths were registered as over 65 years.

„	„	141	„	„	„	„	under 1 year.
„	„	129	„	„	„	„	as between 25 & 65 years.

In 1902, 101 deaths were registered as over 65 years.

„	„	99	„	„	„	„	under 1 year.
„	„	109	„	„	„	„	as between 25 & 65 years

INQUESTS.

37 inquests were held for 1904.

46 „ „ „ „ 1903.

26 „ „ „ „ 1902.

INFANTILE MORTALITY.

The number of deaths registered for children under one year of age was 198, giving a proportion of 127 deaths to every 1,000 births registered.

During July and August, 65 deaths were registered, and I presented the ensuing report to the Council on the subject,

advocating the appointment of a female sanitary inspector or health visitor believing that a very large proportion of these deaths can be prevented by suitable “education,” and that Ilford would present a particularly favourable place for the services of such a person—provided great care is exercised in her selection—as the mothers are often ignorant, but are willing to accept advice, and are able to act on it; not being so desperately poor and under such bad conditions as in some of the big towns.

The appointment of a female sanitary inspector was considered by the Public Health Committee, but the matter was postponed for reconsideration in the new financial year.

The deaths among infants under one year of age were due to :—

Measles	...	...	...	...	...	...	...	4
Scarlet Fever	...	...	...	...	...	...	...	1
Whooping Cough	...	...	...	...	...	...	...	5
Diphtheria and Membranous Croup	...	...	...	...	...	...	...	1
Croup	...	...	...	...	...	...	...	—
Diarrhoea and Enteritis	...	...	...	...	...	...	...	76
Phthisis	...	...	...	...	...	...	...	—
Other Tubercular Diseases	...	...	...	...	...	...	...	8
Bronchitis	...	...	...	...	...	...	...	9
Pneumonia	...	...	...	...	...	...	...	11
Other Respiratory Diseases	...	...	...	...	...	...	...	2
Premature Birth	...	...	...	...	...	...	...	23
Heart Disease	...	...	...	...	...	...	...	7
Accidents	...	...	...	...	...	...	...	2
All other causes	...	...	...	...	...	...	...	49
								—
Total	...	...	...	...	...	...	...	198
								—

The following are the Infantile Mortality Rates for Ilford and some other towns during the last 5 years :—

TOWNS.	YEARS.				
	1900	1901	1902	1903	1904
Ilford	141	156	74	92	127
Barking	203	198	134	113	142
East Ham	166	156	117	113	140
Leyton	140	136	107	99	138
Walthamstow ...	158	147	115	113	135
West Ham	192	172	151	148	165
Woodford	182	127	110	107	126
Romford (Urban) ..	105	138	101	99	110
Acton	168	170	149	105	142
Battersea	159	163	136	135	147
Croydon	132	140	133	104	128
Lewisham	—	128	122	92	122
Willesden	139	131	130	123	115

The corrected death-rate for Ilford for 1903 was 10.8, a death-rate which it is desirable to maintain or to improve. One of the chief reasons, however, of its being so low, was the absence of summer diarrhœa amongst children, during that year.

During the present year Ilford has not been so fortunate, as during the months of July and August 65 children have died from summer diarrhœa alone.

This report is presented in the hope that something may be done to lessen this fearful waste of infant life, which is also of national importance in view of the now well recognised diminishing birth-rate.

Zymotic Enteritis or summer diarrhœa always occurs among children when there is a hot, dry summer.

The Infant mortality rate, or the number of infants under 1 year, dying out of 1,000 born, in Ilford, for the 5 years is seen from the following table :—

Year.	Number of Births.		Deaths under 1 year.		Infant mortality rate, or rate per 1,000 births registered.			
1897	...	635	...	88	...	...	...	138
1898	...	697	...	107	...	...	...	153
1899	...	895	...	120	...	...	...	134
1900	...	1037	...	147	...	...	...	141
1901	...	1194	...	187	...	...	...	156
Average...	...	891	...	129	...	...	...	144

Average death-rate per 1,000 births registered :—

For England and Wales for same period	...	...	...	157
do. do. in Urban Communities	...	...	...	170
do. do. in Rural do.	...	...	...	128

In 1902 the rate for Ilford was	...	...	...	74
„ „ „ „ „ England and Wales	...	...	...	133
„ „ „ „ „ Urban Communities	...	...	...	143
„ „ „ „ „ Rural „ „	...	...	...	118
In 1903 the rate for Ilford was	...	...	...	92
„ „ „ „ „ England and Wales	...	...	...	132

So that as compared with England and Wales as a whole, for 1902 and 1903, Ilford made distinct progress as regards its Infant Mortality rate.

It will be seen from the above, too, that the waste of infant life is far greater in Urban Communities than in Rural—a fact which must be borne in mind with regard to rapidly increasing Ilford as becoming more and more truly Urban in character.

The Infant Mortality in 10 year periods from 1851 is shown by the following tables :—

England and Wales.			London.		
Period.	Annual mortality of Infants under one year of age per 1,000 births.		Period.	Annual mortality of Infants under one year of age per 1,000 births.	
1851—60	...	154	1851—60	...	155
1861—70	...	154	1861—70	...	162
1871—80	...	149	1871—80	...	158
1881—90	...	142	1881—90	...	152
1891—1900	...	154	1891—1900	...	160

In July and August of the present year the rainfall has been small compared with 1902 and 1903 by the figures given below, and taken by Mr. Chittock at the Sewage Works :—

		1902.		1903.		1904.
July	...	1.65	...	6.20	...	1.59
August	...	2.62	...	3.45	...	.66
		—		—		—
Total	...	4.27	...	9.65	...	2.25
		—		—		—

Consequent on the deficient rainfall and the presence of sunshine, the earth has become very warm, and these two factors have been proved to be the forerunners of diarrhoea in children.

In Ilford the following deaths among children under one have occurred week by week during July and August in the last three years, and the cause of death registered has been that due to Enteritis or Diarrhœa :—

	1902.	1903.	1904.
Week ending July 9 ...	— ...	1 ...	1
„ „ „ 16 ...	— ...	1 ...	—
„ „ „ 23 ...	— ...	1 ..	3
„ „ „ 30 ...	— ...	1 ...	7
„ „ Aug. 6 ...	— ...	— ...	9
„ „ „ 13 ...	— ...	— ...	16
„ „ „ 20 ...	1 ...	— ...	16
„ „ „ 31 ..	— ...	1 ...	13
Total	1 ...	5 ...	65

The question of the exact cause of this disease has not yet been satisfactorily determined; but it is certainly due to contamination of the food in some way. Whether this cause is introduced into the food at the farm, at the dairy, or in the house is a difficult matter to decide. Possibly either, or all.

Of 65 children who died, 61 were receiving their nourishment from the bottle. Seven were recently weaned, and four only were entirely mother fed.

A proportion of the children that succumb to Summer Diarrhœa are previously healthy children, but others that are not so, are often unhealthy solely from the want of knowledge on the part of the mother with regard to the suitability of the food to the needs of the infant. Often, too,

it is the first child that succumbs, as the urbanisation of the population with the employment of girls in the City until their marriage does not allow of that practical domestic education which is more prevalent in Rural than Urban communities. It is these delicate children that drop off most easily as soon as the conditions are favourable.

Of these 65 children, more than half have been in a state of bad nutrition before the diarrhœa commenced. These are the children with whom an effort should be made to bring them up to a reasonable state of resisting power. They are able to survive in the ordinary way, as during 1902 and 1903, but not such years as 1904. Moreover, if they survive, it by no means follows that they are weakly after.

The number of children brought up by hand is constantly on the increase, partly due to disinclination on the part of some mothers to suckle their children, but more often, I believe, the mother in Urban districts is becoming more and more unable to herself provide the child with milk that is sufficient in quantity and suitable in quality.

Of the houses from which these deaths came 57 were houses under £30 a year rental, and only 8 over £30.

When I was appointed Medical Officer of Health in the early part of 1902 I drew up a pamphlet of infant feeding instructions to mothers, in the care of their children. This was approved by the Council, copies were printed, which were and are supplied to the Registrar of Births, who is good enough to distribute them to the parents on the registration of the birth of the infant. Also too, increased care was

taken with the milk shops and dairies, so as to have the milk supplied in as good a condition as possible.

The regular and complete removal of house refuse, too, is of great importance in this connection, and this has greatly improved of recent years. These efforts, I believe, have had a certain beneficial result, but something more should be done to endeavour to cope with this waste of life.

But it is useless confining our efforts to the Summer alone. To make any headway it is necessary to work at the problem all the year round, and in many different directions. As a very important factor, I strongly urge the appointment of a Female Sanitary Inspector. Great care should be exercised in her selection, for it is not only that she should be qualified and have the necessary knowledge, but she should be a woman of tact and used to this particular kind of work, so that she should gain the confidence and respect of the mothers. Her primary duty should be to visit and re-visit all or most, depending, of course, on the class of the houses where there is a baby under 12 months of age. By keeping these babies under observation she would soon learn of any deviation from normal health, and to be able to give advice and help at those times when help is most required before the infants are bad enough for the mothers to call the Doctor. Also too, by this means she would get to know the most weakly ones and those running the most danger in hot weather, so that these babies could receive extra attention at the time. If this did not occupy her whole time she could give help with the minor infectious diseases.

So that to sum up :—

(1) The immediate precursor of this type of epidemic is invariably deficient rainfall and a high temperature.

(2) The fatality among these children depends largely on their previous condition of health.

(3) Mothers require personal help and advice with regard to their infants.

(4) Cleanliness in the house, the dairy, and the cowshed are all of great importance. All food should be protected from dirt as much as possible.

(5) Sanitary arrangements must be kept in good condition, and all gullies, drains, and sewers kept well flushed.

To deal with these I should advise :—

(1) That a Female Sanitary Inspector be appointed.

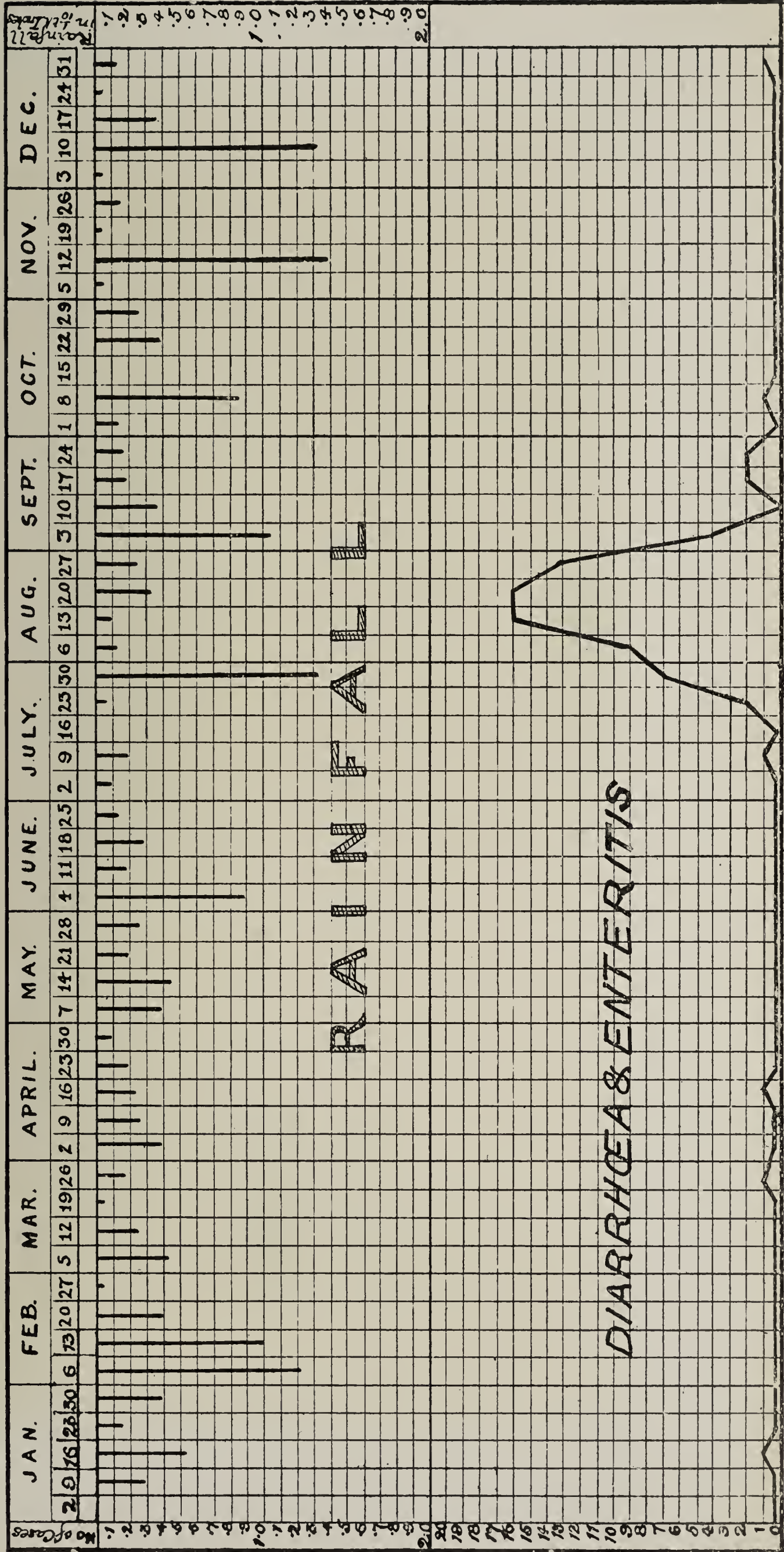
(2) That the distribution of leaflets on infant feeding be persevered with, as heretofore.

(3) That a few simple sanitary rules be drawn out, printed on a card and distributed as required.

(4) That every care be exercised to obtain as good a milk supply as possible.

Finally, I should like to express my indebtedness to Mr. King for the trouble he took in getting particulars of the deaths for me.

DIARRHŒA & ENTERITIS CHART OF DEATHS UNDER 1 YEAR OF AGE, ALSO SHEWING WEEKLY RAINFALL.



WEEKLY RAINFALL FOR THE YEAR, 1904.

Week ended	Rainfall in inches.	Week ended	Rainfall in inches.
Jan. 2	... Nil	July 2	07
„ 9	27	„ 9	14
„ 16	53	„ 16	... Nil
„ 23	15	„ 23	05
„ 30	39	„ 30	... 1.31
Feb. 6	... 1.21	Aug. 6	12
„ 13	... 1.03	„ 13	07
„ 20	40	„ 20	31
„ 27	05	„ 27	23
Mar. 5	41	Sept. 3	... 1.13
„ 12	24	„ 10	37
„ 19	02	„ 17	17
„ 26	14	„ 24	15
April 2	37	Oct. 1	16
„ 9	24	„ 8	85
„ 16	24	„ 15	... Nil
„ 23	18	„ 22	39
„ 30	07	„ 29	23
May 7	35	Nov. 5	05
„ 14	44	„ 12	... 1.38
„ 21	18	„ 19	03
„ 28	26	„ 26	14
June 4	87	Dec. 3	04
„ 11	15	„ 10	... 1.32
„ 18	28	„ 17	36
„ 25	11	„ 24	03
		„ 31	12

Total rainfall for year, in inches, 17.8.

TABLE I.
VITAL STATISTICS OF WHOLE DISTRICT DURING 1904 AND PREVIOUS YEARS.

Year.	Total Population estimated to Middle of each year.		Nett Population estimated to Middle of each year.		BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.						Deaths of Non-residents registered in Public Institutions in the District.		Deaths of Residents registered in Public Institutions beyond the District.		Nett Deaths at all ages belonging to the District.	
	1	2	3	Rate.	Under 1 year of age.		At all ages.		Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	Nett Deaths at all ages belonging to the District.						
					Number.	Rate per 1,000 Births Registered.	Number.	Rate.										
1894	16,424	15,974	389	24.3	49	125.9	438	26.6	317	317	7	128	8.0					
1895	18,822	18,122	455	25.1	58	127.4	532	28.2	358	358	?	174	9.5					
1896	21,570	20,570	496	24.1	61	122.9	483	22.3	301	301	?	182	8.8					
1897	24,719	23,319	635	27.2	88	138.5	481	19.4	254	254	?	227	9.7					
1898	28,328	26,468	697	26.2	107	153.5	535	18.8	271	271	12	276	10.4					
1899	32,464	30,154	895	29.6	120	134.0	650	20.3	281	281	13	382	12.6					
1900	37,204	34,399	1,037	30.0	147	141.7	655	17.6	231	231	25	449	13.0					
1901	42,622	39,022	1,194	30.5	187	156.6	657	15.4	245	245	22	434	11.1					
1902	49,000	44,530	1,334	29.9	99	74.2	748	15.2	373	373	30	415	9.3					
1903	54,226	49,646	1,522	30.6	141	92.6	828	16.6	364	364	27	498	10.0					
Aver- ages for years 1894— 1903.	32,537	30,220	865	27.7	105	126.7	600	20.0	299	299	?	316	10.2					
1904	59,700	54,120	1,548	28.6	198	127.0	933	15.6	383	383	29	563	10.4					

This table has been corrected as regards "estimated population" by calculating the ratio of increase of the population year by year from 10,913 in 1891 to 42,622 in 1901, that is, from census to census. Column 8 is thus calculated from the total estimated population in column 1. All the other columns are calculated from the estimated nett population, that is, not including the populations of the Public Institutions, viz. :—

Claybury Asylum.

West Ham Asylum.

Dr. Barnardo's Village Homes.

It will be noticed that for the earlier years the rates are too low; that is due to this method bringing the populations for the earlier years too high.

This table should be compared with the corresponding table in last year's report.



TABLE IV.

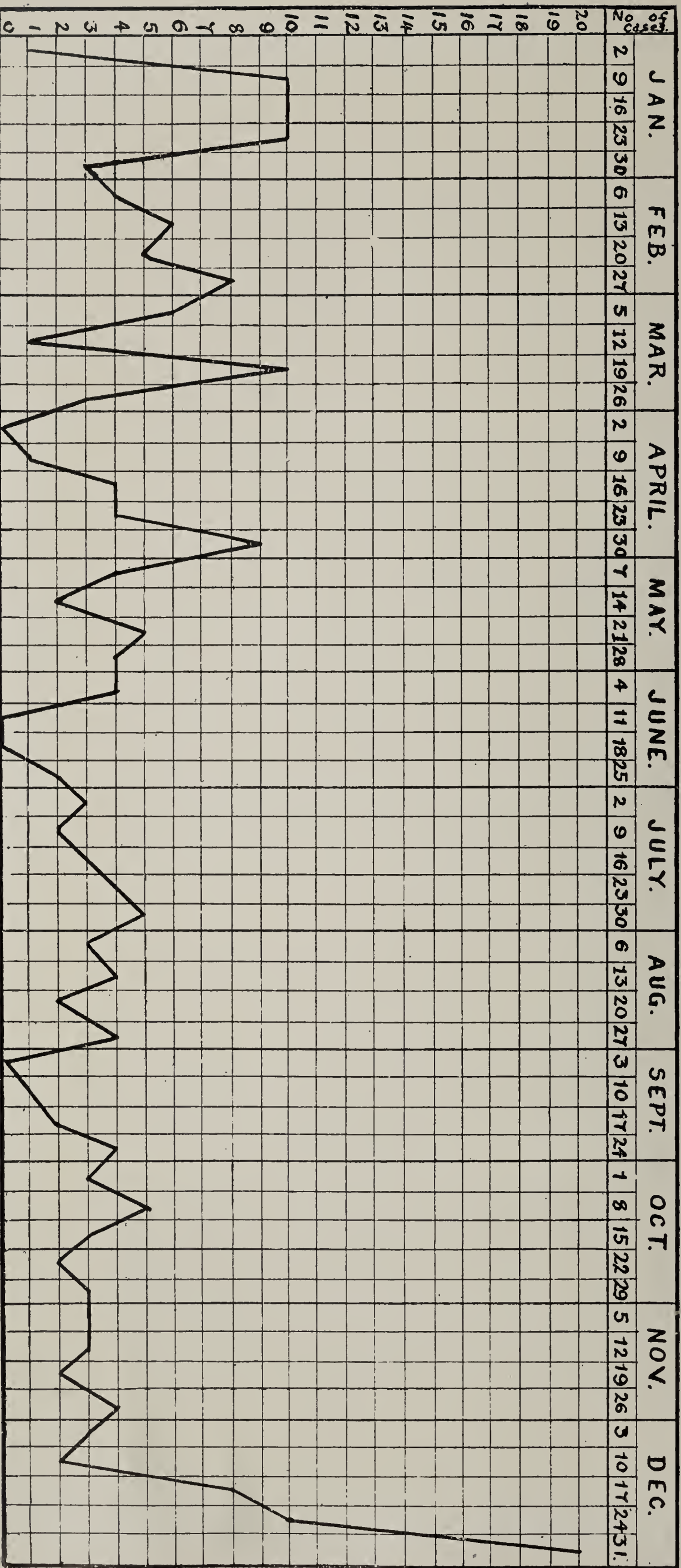
CAUSES OF, AND AGES AT, DEATH DURING YEAR 1904.

CAUSES OF DEATH.	DEATHS AT THE SUBJOINED AGES OF "RESIDENTS" WHETHER OCCURRING IN OR BEYOND THE DISTRICT.							DEATHS AT ALL AGES OF "RESIDENTS" BELONGING TO LOCALITIES, WHETHER OCCURRING IN OR BEYOND THE DISTRICT.			TOTAL DEATHS WHETHER OF RESIDENT OR NON "RESIDENTS" IN PUBLIC INSTITUTIONS IN THE DISTRICT.
	All Ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Central Ward.	South Ward.	Hainault Ward	
Small-pox	...	...	...	...	...	...	...	...	...	...	1
Measles	17	4	12	1	...	...	...	6	7	4	...
Scarlet Fever	5	1	2	1	1	...	...	3	1	1	...
Whooping-cough	8	5	2	1	...	...	...	3	3	2	...
Diphtheria and Membranous Croup	10	1	4	4	1	...	...	3	4	3	...
Croup	...	...	...	...	...	...	...	...	...	...	...
Fever { Typhus	...	...	...	...	...	...	...	...	...	...	...
Enteric	4	...	...	...	...	4	...	2	2	...	...
Other continued	...	...	...	...	...	...	...	...	...	...	...
Epidemic Influenza	1	...	1	...	...	...	...	1	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...
Plague	...	...	...	...	...	...	...	...	...	...	...
Diarrhœa	53	41	11	...	...	...	1	22	17	14	4
Enteritis	43	35	7	...	...	1	...	21	16	6	...
Puerperal Fever	4	...	...	...	...	4	...	1	1	2	...
Erysipelas	1	...	...	...	...	...	1	...	1	...	...
Other Septic Diseases	1	...	...	...	...	1	...	1	...	...	...
Phthisis (Pulmonary Tuberculosis)	33	...	1	2	4	25	1	11	18	4	48
Other Tubercular Diseases	22	8	8	3	3	...	...	8	8	6	7
Cancer, Malignant Disease	28	...	...	...	1	14	13	19	6	3	6
Bronchitis	34	9	4	...	...	8	13	13	17	4	17
Pneumonia	28	11	4	1	1	9	2	12	10	6	74
Pleurisy	2	...	...	...	...	1	1	1	1	...	...
Other Diseases of Respiratory Organs	5	2	...	1	1	1	...	2	3	...	2
Alcoholism	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of Liver }	6	...	...	...	...	6	...	1	4	1	1
Venereal Diseases	...	...	...	...	...	...	...	...	...	...	1
Premature Birth	23	23	...	...	...	...	...	13	4	6	...
Diseases and Accidents of Parturition	1	...	...	...	...	1	...	1	...	...	...
Heart Diseases	40	7	2	1	2	12	16	19	17	4	28
Accidents	15	2	3	1	1	6	2	11	1	3	4
Suicides	4	...	...	...	1	3	...	2	2	...	...
All other causes	146	49	9	2	2	34	50	68	41	37	177
All causes	534	198	70	18	18	130	100	244	184	106	370

SECTION II.

Infectious Diseases.

SCARLET FEVER CHART OF NOTIFICATIONS.



INFECTIOUS DISEASES.

During 1904, 508 cases of infectious disease have been notified.

In 1903,	364 cases were notified, exclusive of Measles
„ 1902,	738 „ „ „ „
„ 1901,	437 „ „ „ „

From the institutions in the district the following cases have been notified :—

Claybury.	West Ham Asylum.	Village Homes.
Erysipelas 7.	Small Pox 6.	Scarlet Fever 23.
	Typhoid Fever 1.	Erysipelas 2.

SCARLET FEVER.

During 1904, 224 cases of Scarlet Fever were notified, with 5 deaths, giving a death-rate of .09 per 1,000 living.

During 1903, 181 cases of Scarlet Fever were notified, with 2 deaths, giving a death-rate of .04 per 1,000 living.

During 1902, 264 cases of Scarlet Fever were notified, with 2 deaths, giving a death-rate of .04 per 1,000 living.

During 1901, 285 cases of Scarlet Fever were notified, with no death.

During 1904, the death-rate for Walthamstow was .12 per 1,000 living.

During 1904, the death-rate for East Ham was .08 per 1,000 living.

During 1904, the death-rate for Hornsey was .01 per 1,000 living.

During 1904, the death-rate for Leyton was .05 per 1,000 living.

As will be seen from the chart, there has been a steady prevalence during the year, with a sudden rise at the end; due to an outbreak of Scarlet fever at the Village Homes.

It is very difficult to account for this outbreak, as the cases did not occur in any one cottage, but were distributed about—one case in this cottage, and another in that, in the most irregular manner. The children are constantly moving about, backwards and forwards to London, so that makes the problem more difficult of investigation, but easier of explanation. As the greater the number of points-of-contact, so the easier the spread of infection.

The investigation and control of this disease are most puzzling and difficult, as when everything seems favourable to a spread of the disease, nothing further takes place; and when cases occur it seems impossible to trace the cause of the outcrop.

SMALL POX.

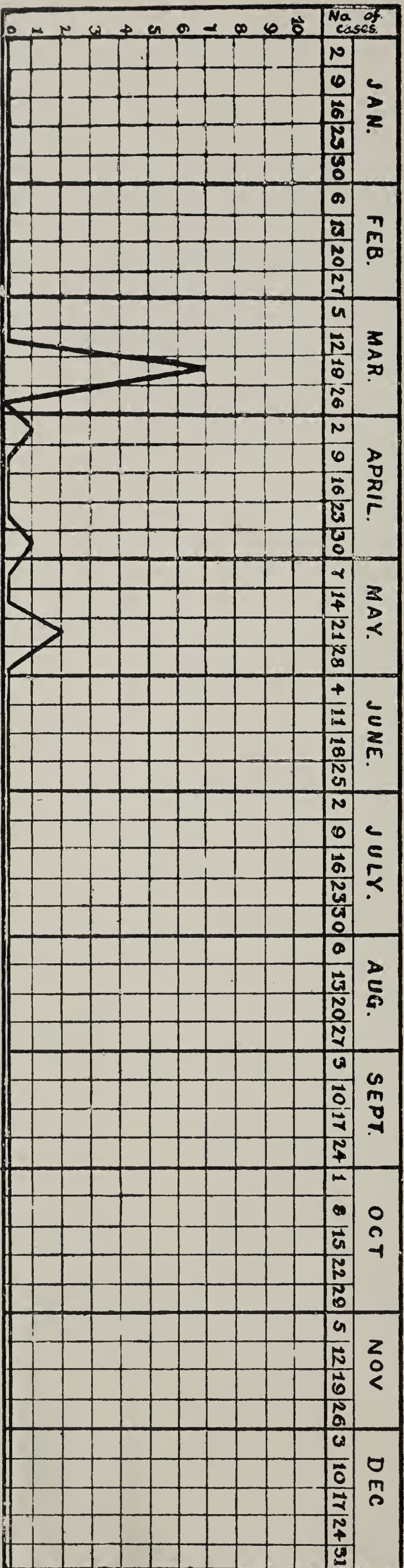
During the year 11 cases of Small Pox have been notified, distributed as follows :—

	Central Ward.	South Ward.	Hainault Ward.
In 1903	5 2	— 3	6 4

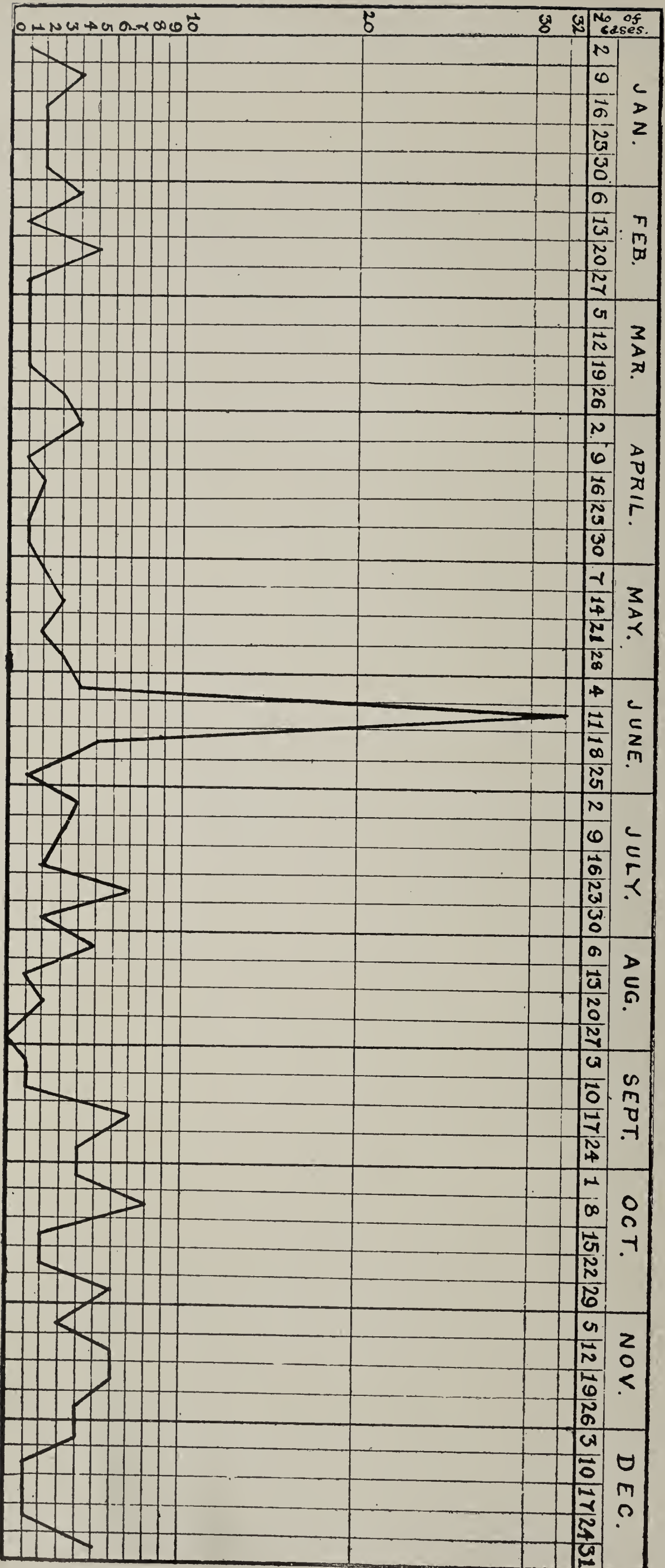
The 6 cases in the Hainault Ward were at West Ham Asylum. An outbreak occurred there, and the six were infected almost simultaneously. There were several cases of Small Pox in West Ham at the time, and it is probable the infection was brought in on visiting day. The Asylum authorities took prompt measures for isolation, and vaccination of the other inmates. No further extension of the disease took place.

One of the 5 cases in the Central Ward was a baby, the child of one of the night attendants in the affected ward at West Ham Asylum; and curiously enough, this child developed Small Pox practically at the same time as the

SMALL POX CHART OF NOTIFICATIONS.



DIPHTHERIA CHART OF NOTIFICATIONS.



other cases in the Asylum. The infection must have been brought into the ward, and this attendant taken it home to his child, so that the patients, with the child, were all incubating Small Pox at the same time. The baby was unvaccinated. Another case occurred in a woman who had been visiting a supposed case of Chicken Pox in West Ham.

A further case occurred on April 30th, the origin it was impossible to trace, and which presented some difficulty in diagnosis. However, both the Medical Attendant and myself came to the conclusion that it was Small Pox. She was removed to Dagenham Hospital on the 2nd May, after some trouble. There were 2 men in the house, who refused vaccination. These men stayed at home, and were visited at intervals. On May 17th a visit was made by the Inspector, and the elder one came to the door and stated they were both well, and the other man had gone to business.

On the 19th I visited the house, and saw the elder man at the door. He stated his brother was at business, and there was no one in the house. As I saw a shadow reflected through the glass door of the kitchen, I went in, and found the younger man with a well-marked Small Pox eruption, which had certainly been out 2 or 3 days. The next day the elder man also developed Small Pox. They were both removed to the Hospital.

Action was taken after they came out against the elder, under the Notification of Infectious Diseases Act, for failing to notify us of the existence of Small Pox in his brother. He was fined 10s. and costs.

DIPHTHERIA AND MEMBRANOUS CROUP.

181 cases have been noted for the year 1904, distributed as follows :—

Central Ward	...	...	...	...	108 cases
South Ward	...	...	...	...	55 „
Hainault Ward	...	...	...	...	18 „

10 deaths were recorded, giving a death-rate of .18 per 1,000 living.

In 1903 there were 95 cases notified, distributed as follows :—

Central Ward	35 cases
South Ward	44 „
Hainault Ward... ..	16 „

14 deaths were recorded, giving a death-rate of .28 per 1,000 living.

In 1902, 86 cases were notified, with 8 deaths, giving a death-rate of .17 per 1,000 living.

In 1901, 75 cases were notified, with 6 deaths, giving a death-rate of .15 per 1,000 living.

In the following districts the death-rates for 1904 were :—

East Ham ...	.38 per 1,000 persons living
Leyton	.13 „ „ „ „
Walthamstow ...	.24 „ „ „ „
Hornsey ...	.08 „ „ „ „

Diphtheria has been much more prevalent during the past year than ever before, as can be seen from the table at the end of the present section.

There was a definite outbreak in June, followed by a fall during the summer holidays; but during the autumn session there was a steady prevalence of Diphtheria, probably due to contact with mild cases during school hours.

The following reasons seem to justify this conclusion :—

(1) The higher weekly return during school terms can be seen from the chart on the opposite page.

(2) The ages of those notified—

52 being under school age,
83 at school age,
46 above school age.

(3) The prevalence among children attending certain schools.

(4) The absence of any one general cause such as is mentioned in the June outbreak.

An outbreak occurred in June, and I presented the following report on it, which will explain that occurrence :—

On the morning of Monday, June 6th, five notifications of cases of Diphtheria in 4 houses were received, and I was informed that one was in connection with one of the schools. I visited this school in the course of the morning, but could trace no other connection between the school and the outbreak.

On going to the Office in the afternoon, Mr. King, the Sanitary Inspector, informed me that these four cases of Diphtheria derived their milk supply from one dairyman. As this was suspicious, I immediately visited the dairyman and found that he obtained his milk from two farms, the greater quantity from one farm at Romford. At my request the dairyman gave me an order to inspect the farms, and I at once went to Romford. I have since inspected the other farm, which is in a satisfactory condition. At Romford I found the holding really consisted of two adjoining farms, tenanted by one man, who was milking about 80 cows on the two farms, and from these cows was supplying all his milk to three dairymen in Ilford. The two farms can be distinguished as A and B, and the three dairymen in Ilford as C, D, and E, but dairyman E obtained all his milk from farm B, and no case was

notified in connection with his dairy, so that we are only concerned with dairymen C and D. A separate set of cows were milked at A and B farms with a different set of milkers at each farm.

When I arrived at farm A I found the farmer, who also lives at this farm, at work milking, while he had three children down with Diphtheria in the house. A man and his son had been employed as milkers at this farm A from Thursday, May 26th to Saturday, June 4th. These men were living in Romford, where the father's three other children were ill with Diphtheria. After a talk with the farmer I arranged to meet him in the evening at the house of dairyman C. I then on my way home advised the three dairymen not to use any milk coming from this farmer, as, of course, the farmer himself might have infected the lot of milk that would have come up from the farm that evening.

As the Public Health Committee happened to be sitting that evening I reported the matter to them, and they empowered me to take what steps I thought necessary.

On thinking the matter over I came to the conclusion that the milk was probably infected by one of the milkers at farm A, who came from one of the infected houses, probably one of the two men from the house in Romford. Therefore, at the interview in the evening with the farmer and the dairymen concerned I advised :—

- (1) That the farmer should abstain from milking, or having anything to do with the milk directly.
- (2) That all the cows should be milked at farm B.
- (3) That none of the milkers hitherto working at farm A should be employed at farm B.
- (4) That the milkers be made to thoroughly wash their hands before milking.

(5) That the cowsheds at farm A be whitewashed and cleansed.

I found that the churns were all being thoroughly scalded and cleansed by the dairymen before being sent back to the farm.

With these precautions I saw no reason why the dairymen should not continue to use the milk. This course was adopted, and I gave a certificate to that effect.

In all, 36 cases of Diphtheria were notified :—

On Sunday June 5	...	5	Received Monday morning
„ Monday, June 6	...	8	
„ Tuesday, June 7	...	12	
„ Wednesday, June 8		6	
„ Thursday, June 9		1	
„ Friday, June 10	..	1	
„ Saturday, June 11		1	
„ Sunday, June 12	...	1	
„ Tuesday, June 14		1	A contact from one of the
		—	above cases.
		36	
		—	

In connection with these, 25 houses were supplied by dairyman C and 5 by dairyman D.

The milk supplied to these dairymen by the farmer was exactly three times as much to dairyman C as to dairyman D.

One household had milk supplied by two dairymen, dairyman C and another, the milk supplied by dairyman C was reserved for the use of one inmate, and he contracted Diphtheria, the others escaped,

Of the 36 cases, 9 were removed to the Isolation Hospital, and of the total 4 were servants, or 11 per cent. of the whole,

No death has been registered, which I believe to be due to the early and free use of Antitoxin.

The Council supplied Antitoxin free to any Medical Practitioner who cared to apply for it, and in all £10 10s. od. was spent for this.

The total cost to the Council will not be less than £100.

Few precautions appear to have been taken in preserving the milk from infection, and the water supply of the farm at Romford is most unsatisfactory, but steps have been taken to remedy this.

While the supervision of country dairy farms is the same as at present, I am of opinion that the Council is never safe from a repetition of some such experience. This time we have been exceptionally fortunate, but a repetition should be guarded against.

What I recommend is, as I suggested in my Annual Report for 1902, that supervision and regular inspection of these farms supplying milk to the Ilford district should be carried out by voluntary agreement with the dairymen, and, if found desirable, certificates granted by the Medical Officer of Health to those farms that come up to a certain standard and are willing to take reasonable precautions.

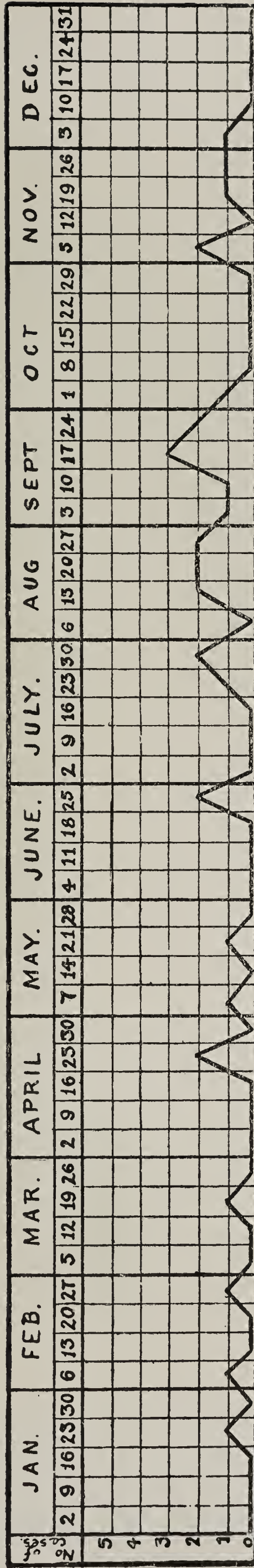
TYPHOID FEVER.

32 cases of Typhoid and Continued Fevers have been notified for 1904, with 4 deaths, giving a death-rate of .07 per 1,000 living.

They were distributed as follows:—

Central Ward	12 cases.
South Ward	17 „
Hainault Ward.....	3 „

ENTERIC OR TYPHOID FEVER CHART OF NOTIFICATIONS.



For 1904 the death rates from these diseases were as follows in the undermentioned districts:—

East Ham.....	.12	per 1,000 persons living.
Leyton	.09	„ „ „ „
Walthamstow ...	.08	„ „ „ „
Hornsey.....	.02	„ „ „ „

In 1903, 28 cases were notified, with 2 deaths, giving a death-rate of .04 per 1,000 persons living.

In 1902, 59 cases were notified, with 7 deaths, giving a death-rate of .15 per 1,000 persons living.

In 1901, 33 cases were notified with 4 deaths, giving a death-rate of .10 per 1,000 persons living.

Both during the past year, and in 1903, there has been a marked absence of any history pointing to infection from eating shell-fish.

WHOOPING COUGH.

This disease often follows on after an epidemic of Measles; and during the year there has been a fair amount.

For 1904, 8 deaths were registered, giving a death-rate of .14 per 1000 living.

For 1903, 19 deaths were registered, giving a death-rate of .30 per 1000 living.

For 1902, 3 deaths were registered, giving a death-rate of .06 per 1,000 living.

For 1901, 21 deaths were registered, giving a death-rate of .53 per 1000 living.

In East Ham during 1904 the death-rate was .19 per 1,000 persons living.

In Leyton during 1904 the death-rate was .42 per 1,000 persons living.

In Walthamstow during 1904 the death-rate was .28 per 1,000 persons living.

In Hornsey during 1904 the death-rate was .20 per 1,000 persons living.

ERYSIPELAS.

For 1904, 56 cases have been notified, with 1 death.

In 1903, 49 cases were notified, with no death.

„ 1902, 67 „ „ „ 4 deaths.

„ 1901, 37 „ „ „ 1 death.

PUERPERAL FEVER.

During 1904, 4 cases were notified, with 4 deaths.

„ 1903, 2 „ „ „ 1 death.

„ 1902, 4 „ „ „ 2 deaths.

„ 1901, none were notified.

There was no connection between any of the cases.

PHTHISIS.

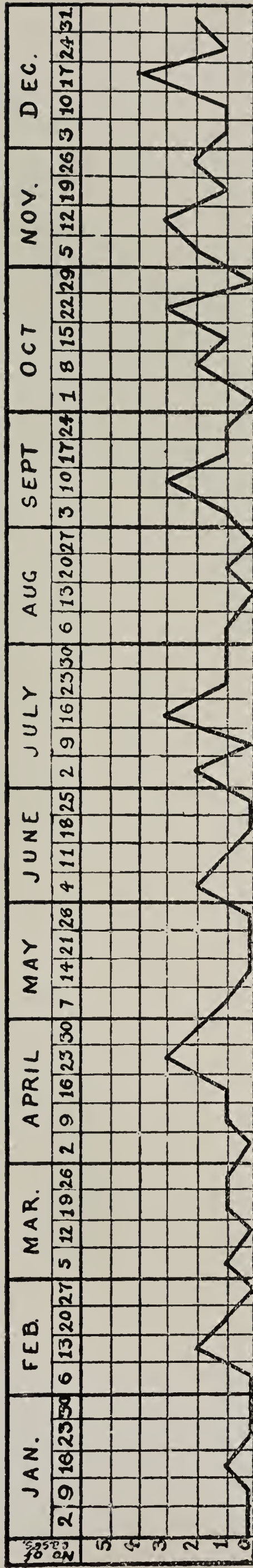
During 1904, 33 deaths were registered giving a death-rate of .60 per 1,000 persons living

During 1903, 36 deaths were registered giving a death-rate of .72 per 1,000 persons living.

During 1902, 32 deaths were registered giving a death-rate of .71 per 1,000 persons living.

During 1901, 19 deaths were registered giving a death-rate of .48 per 1,000 persons living.

ERYSIPELAS CHART OF NOTIFICATIONS:



In the following districts the death-rates for 1904 were as follows:—

East Ham	1.18	per 1,000 persons living.
Leyton	1.20	„ „ „ „
Walthamstow..	.85	„ „ „ „
Hornsey	.57	„ „ „ „

RESPIRATORY DISEASES EXCLUSIVE OF PHTHISIS.

For 1904, 69 deaths were registered giving a death-rate of 1.2 per 1,000 persons living.

For 1903, 73 deaths were registered giving a death-rate of 1.4 per 1,000 persons living.

For 1902, 67 deaths were registered giving a death-rate of 1.5 per 1,000 persons living.

For 1901, 44 deaths were registered giving a death-rate of 1.1 per 1,000 persons living.

CANCER.

For 1904, 28 deaths were registered giving a death-rate of .51 per 1,000 persons living.

For 1903, 21 deaths were registered giving a death-rate of .42 per 1,000 persons living.

For 1902, 19 deaths were registered giving a death-rate of .41 per 1,000 persons living.

For 1901, 19 deaths were registered giving a death-rate of .48 per 1,000 persons living.

Of course these last two diseases are not “infectious diseases,” but are placed here for convenience.

MEASLES.

Measles was removed from the Schedule of the Infectious Diseases (Notification) Act, on 25th of May, 1904.

Up to that date 422 cases were notified from the beginning of the year. Since that date, to the end of the year, information of 716 cases was received at the Town Hall from the Teachers and Attendance Officers.

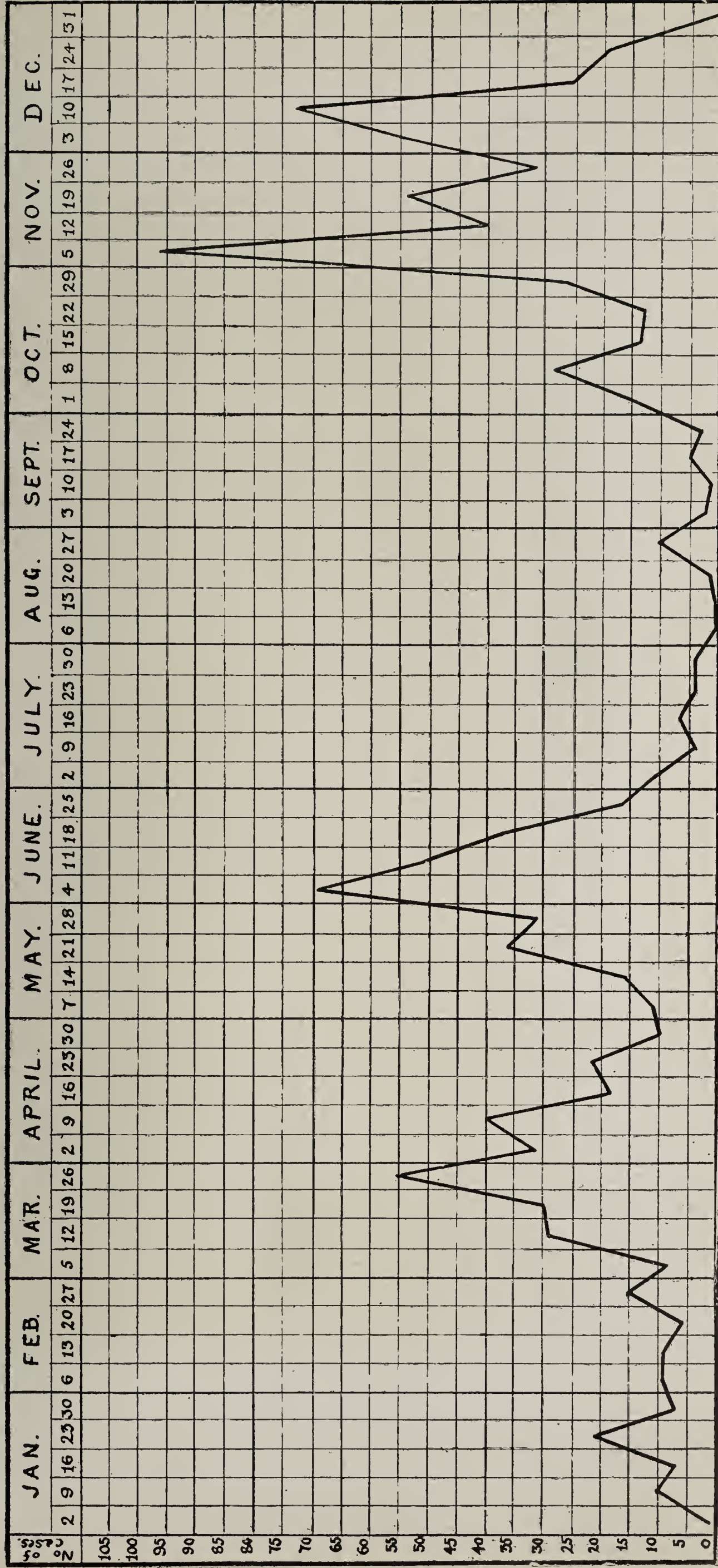
Making in all	1,138	cases reported for	1904,	nett pop.	54,120
As against	684	„ notified	„ 1903,	„ „	49,646
„	564	„ „	„ 1902,	„ „	44,530
„	805	„ „	„ 1901,	„ „	39,022
„	326	„ „	„ 1900,	„ „	34,399
„	467	„ „	„ 1899,	„ „	30,154
„	425	„ „	„ 1898,	„ „	26,468

The following shows the number of cases of Measles notified, of children under and over 8 years of age.

	1902.	1903.	1904.
Under 8 years	450	578	887
Over 8 years and under 14	96	83	138

So that it will be seen that the incidence of Measles has been very heavy during the past year. In December I reported on the closing of schools for Measles to the Education Committee, and they passed a resolution to the Council, asking for the restitution of Measles to the list of Infectious Diseases notifiable under the Act. On the face of it one would naturally conclude the removal of Measles from the schedule was followed by an outbreak of that disease, and therefore the best way is to reinstate it. But on looking more closely at the above figures it will be seen that the incidence was already heavy before the notification ceased.

MEASLES CHART OF NOTIFICATIONS:



For the past year it will be noticed, too, that during the years that notification was in force, there was a steady increase in the number of cases of Measles. In 1901 there were 805 cases; so that it did not look as though the mere fact of notification had any appreciable effect on checking the spread of the disease. From a common-sense point of view it is what might be expected, for Measles, unlike most infectious diseases, is infectious for about three days before the rash appears; so that it is impossible to say whether a child has only a cold, or is incubating Measles. Now, the same steps are taken with regard to Measles (advice to parents, isolation of patient, and disinfection if required), as when it was notifiable under the Act. So that the only difference is in the source from which information is received; formerly from the Medical Practitioners and the school machinery, now from the Teachers and Attendance Officers only. The result is that the information is not received so promptly, due to the fact that it is impossible for the present staff of Attendance Officers to cope with their work properly. From the point of view of limiting the spread of the disease, however, it is doubtful if this makes much difference, as whether one receives information on the first or third day of the appearance of the disease the mischief is already done, and the classroom infected in either case.

Then, too, Measles is essentially a disease of school life, as is shown by the above figures. The only two ways in which this information by Teachers and Attendance Officers fail are:—

1. During the holidays.
2. In the disease occurring in young children under school age where no other older child in the house is attending school.

The other point in regard to the question of the inclusion of Measles under the Notification of Infectious Diseases Act is the mortality.

During the past year, there have been 16 deaths from Measles.

The following table shows the mortality of Measles for this district, for the past eight years.

Year.	Cases notified.	Deaths.	Death-rate per cent. of cases notified.
1897	323	3	.92
1898	435	5	1.1
1899	467	12	2.5
1900	326	2	.61
1901	805	5	.79
1902	464	3	.53
1903	684	10	1.4
1804	1138	17	1.49
	4634	57	Average 1.2 per cent. of cases notified.

It is too soon to say anything yet, as to the effect on this ; but I do think it is in this connection that early information is likely to make a difference, and that is why I would urge an addition to the Attendance Officers on the Council's staff. If Measles had continued notifiable, it would have cost the Council, for the past year, £89 10s. od. on the number we have already knowledge of ; and of course there are numerous other cases due to the above-mentioned defects, which would add to the cost. So that if this money was spent on the Attendance Officers, the Council would reap the same benefit

as regards Measles, as if it were made notifiable; and, in addition, would improve their grant earning power, by obtaining an improved attendance.

The death-rate from Measles in the following districts during 1904, is appended for comparison :—

East Ham.....	.46	per 1,000 persons living.
Leyton	.24	„ „ „ „
Walthamstow.	.48	„ „ „ „
Hornsey	.22	„ „ „ „
Ilford.....	.29	„ „ „ „



TABLE III.
CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1904.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.							TOTAL CASES NOTIFIED IN EACH LOCALITY.			No. of Cases Removed to Hospital from each Locality.			
	At Ages—Years.						65 and upwards.	Central Ward.	South Ward.	Hainault Ward.	In all.	CENTRAL WARD.	South Ward.	Hainault Ward.
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.								
Small-pox ...	11	1	...	...	2	8	...	5	...	6	5	...	...	...
Cholera ...	174	1	48	84	22	19	...	104	52	18	74	42	26	...
Diphtheria ...	7	...	3	4	...	...	...	4	3	...	6	3	3	...
Membranous Croup	56	2	1	4	8	35	6	26	12	18	...	...	...	...
Erysipelas ...	224	1	54	132	24	13	...	69	71	84	140	39	45	56
Scarlet Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever	29	...	1	3	3	22	...	11	15	3	7	5	2	...
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Relapsing Fever	3	...	...	...	2	1	...	1	2	...	2	...	2	...
Continued Fever	4	...	...	...	...	4	...	1	...	3	...	...	...	...
Puerperal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	508	5	107	227	61	102	6	221	155	132	234	94	78	62

TABLE GIVING DEATH RATE FROM VARIOUS INFECTIOUS DISEASES DURING THE PAST 14 YEARS.

Years.	Small pox.			Erysipelas.			Diphtheria & Membranous Croup.			Scarlet Fever.			Enteric & Continued Fevers.			Puerperal Fever.			Measles.			Estimated Population.
	Cases.	Deaths.	Rate per 1,000.	Cases.	Deaths.	Rate per 1,000.	Cases.	Deaths.	Rate per 1,000.	Cases.	Deaths.	Rate per 1,000.	Cases.	Deaths.	Rate per 1,000.	Cases.	Deaths.	Rate per 1,000.	Cases.	Deaths.	Rate per 1,000.	
1891	Nil	Nil	...	9	Nil	...	51	9	.82	11	Nil	...	11	3	.27	Nil	Nil	...	...	4	.36	10,913
1892	1	1	.08	18	Nil	...	29	Nil	...	25	1	.08	6	1	.08	Nil	Nil	...	...	3	.24	12,406
1893	4	Nil	...	30	Nil	...	75	12	.85	138	4	.28	11	2	.14	3	2	.14	...	...	...	14,082
1894	21	1	.06	27	1	.06	29	4	.25	90	1	.06	10	1	.06	1	Nil	...	...	5	.31	15,974
1895	1	Nil	...	36	1	.05	24	2	.11	32	Nil	...	11	2	.11	Nil	Nil	...	...	1	.05	18,022
1896	Nil	Nil	...	47	4	.18	46	7	.34	157	3	.14	34	5	.24	2	2	.09	38	2	.09	20,570
1897	Nil	Nil	...	35	...	...	32	1	.04	132	Nil	...	34	6	.25	2	2	.08	325	3	.12	23,319
1898	Nil	Nil	...	36	...	...	66	2	.07	74	Nil	...	33	3	.11	Nil	Nil	...	425	5	.18	26,468
1899	Nil	Nil	...	60	3	.09	74	11	.36	126	1	.03	26	6	.19	1	Nil	...	467	12	.39	30,154
1900	12	Nil	...	59	1	.02	71	4	.11	190	Nil	...	23	4	.11	1	1	.02	326	2	.05	34,394
1901	6	Nil	...	37	1	.02	76	6	.15	285	Nil	...	33	4	.10	Nil	Nil	...	805	5	.12	39,022
1902	44	8	.17	67	4	.08	86	8	.17	264	2	.04	61	7	.15	3	2	.04	564	3	.06	44,530
1903	9	1	.02	49	Nil	...	95	14	.28	181	2	.04	28	2	.04	2	1	.02	684	10	.20	49,646
1904	11	Nil	...	56	1	.01	174	10	.18	224	5	.09	32	4	.07	4	4	.07	1138	17	.30	54,120

ISOLATION HOSPITAL.

Number of patients in hospital at beginning of year :—

Scarlet Fever ...	...	...	...	26
Diphtheria ...	...	...	...	3
Typhoid Fever ...	...	...	...	1
Erysipelas ...	...	...	...	1
				—
Total ...			31	—

Number of patients admitted during year :—

Scarlet Fever ...	...	...	...	150
Diphtheria ...	...	...	...	80
Enteric Fever ...	...	...	...	9
				—
Total ...			239	—

Number of patients remaining in hospital at end of year :—

Scarlet Fever ...	...	...	...	40
Diphtheria ...	...	...	...	1
				—
Total ...			41	—

Number of deaths in hospital during year :—

Scarlet Fever	4,	giving a death rate of 2.66 per cent		
Diphtheria ...	7,	„	8.75	„
Typhoid Fever	2,	„	22.22	„
In 1903 there was 1 death from Scarlet Fever,				
giving a death rate of .86 per cent.				

In 1903 there were 4 deaths from Diphtheria and Membranous Croup, giving a death rate of 10.7 per cent.

In 1903 there were 2 deaths from Typhoid Fever, giving a death rate of 18.1 per cent.

Average stay in hospital :—

Scarlet Fever ...	...	...	54.7 days
Diphtheria ...	...	...	21.07 „
Enteric Fever...	...	...	40.66 „

Percentage removed to the Isolation Hospital, for the past three years, of cases notified :—

	1902.	1903.	1904.
Scarlet Fever ...	45.45	63.53	62.5
Diphtheria ...	33.71	38.94	44.19
Typhoid Fever ...	54.09	39.28	28.12



TABLE OF ADMISSIONS,
IN THE RESPECTIVE MONTHS, DURING THE LAST THREE YEARS.

MONTHS.	SCARLET FEVER.			DIPHTHERIA.			TYPHOID FEVER.			ERYSIPELAS.
	1902	1903	1904	1902	1903	1904	1902	1903	1904	1903
January	12	16	17	8	7	3	—	—	—	—
February.....	2	11	17	5	5	10	—	—	1	—
March	8	3	13	1	4	3	1	—	1	—
April	13	11	12	3	2	4	3	—	—	—
May.....	6	9	8	1	4	4	3	1	—	—
June.....	9	7	4	2	1	15	3	—	2	—
July	8	6	12	2	1	5	2	—	—	—
August	11	8	10	—	3	3	10	2	2	—
September	2	5	4	—	3	7	6	4	2	—
October	16	11	10	4	2	9	5	2	—	—
November	18	11	7	1	2	12	—	2	1	—
December	15	17	26	4	3	5	—	—	—	1
TOTALS	120	115	140	31	37	80	33	11	9	1

I have performed Tracheotomy seven times during the year with three recoveries. This has never been done unless it was absolutely necessary, large doses of Antitoxin often saving the necessity of interfering.

During the year two probationary nurses contracted Scarlet Fever.

Included in the above table of patients admitted during the year, six cases of Scarlet Fever were admitted from the Romford District and two from the Woodford District.

The question of the advantage, or not, of removal to the Isolation Hospital, is interesting; and although the following particulars are few, they are what have occurred during the past year.

In the case of Scarlet Fever:—

Where the first case has been nursed at home, there have been eight families where an extension of the disease took place.

In one family the second case occurred 6 days after notification of first.

In another family the second case occurred 7 days after notification of first.

In another family the second case occurred 8 days after notification of first.

In another family the second case occurred 10 days after notification of first.

In another family the second case occurred 13 days after notification of first.

In another family the second case occurred 14 days after notification of first.

In another family the second case occurred 28 days after notification of first.

In another family a second case occurred 8 days after the first.

In another family a third case occurred 10 days after the second.

In another family a fourth case occurred 16 days after the third.

In another family a fifth case occurred 8 days after the fourth.

In another family a sixth case occurred 7 days after the fifth.

In three instances on the occurrence of the second case the parents were willing to consent to its removal, and no further extension of the disease took place in those houses after that. On the other hand there was one instance where another case occurred within eight days of the first returning home from the Hospital ; and in another family a recurrence took place eighteen days after the others returned from hospital.

With regard to Diphtheria, there have been three families where an extension took place on nursing the first one at home.

In one family the second case occurred 9 days after notification of first.

In another, the second case occurred 5 days after notification of first.

In another, the third case occurred 4 days after notification of second.

In another, the second case occurred 9 days after notification of first.

In another, the third case occurred 2 days after notification of second.

In another, the fourth case occurred 1 day after notification of third.

In another, the fifth case occurred 2 days after notification of fourth.

In one family the first case was removed to hospital, and another case was notified in the same house 25 days after the first, while the first was still in the hospital. Another, three persons (staying in Ilford) were simultaneously removed to hospital, and on leaving same 23 days after, went straight home into Kent. Another case occurred in that house 53 days after the notification of the first.

On the other hand, there was one instance where a second case occurred in a house within two days of the first case returning home from the hospital; but the child was ailing and vomiting before the hospital case returned home. So that I think this case was not infected from the hospital one, but was already incubating the disease before they came into contact.

The throats of all Diphtheria patients have cultivations taken from them before they are discharged, and are only sent home on their giving a negative result.

With regard to Typhoid Fever there were two families where a second case occurred on the first being nursed at home.

In one house the second case occurred 32 days after notification of the first.

In another, the second case occurred 31 days after notification of the first.

In no instance was there a second case after removal of the first to hospital, or after its return home.

DISINFECTION.

There is a large-sized Washington Lyon steam disinfector at the hospital. This is used for disinfecting the hospital bedding, and also the infected material from the

town is taken there, and disinfected. Two vans are employed in this, one for removing the infected articles, and the other for returning them after. During the past year 372 houses and 4,257 articles have been disinfected, as against 252 houses and 3,250 articles for 1903. They were distributed as follows, in months :—

	HOUSES.			ARTICLES.	
	1903.	1904.		1903.	1904.
January ...	29	36	...	602	397
February ...	26	35	...	307	544
March ...	18	30	...	270	487
April ...	15	21	...	239	209
May ...	22	22	...	273	479
June ...	14	55	...	147	447
July ...	9	24	...	144	96
August ...	21	28	...	234	301
September ..	20	28	...	250	260
October ...	18	35	...	141	338
November...	29	28	...	280	241
December ...	31	30	...	363	458

Two men are employed on this work part time. The senior man holds a certificate of the Sanitary Institute, and is responsible for the proper carrying out of the work.

The rooms are sprayed with a 1 or 2 per cent. Formalin solution, from a Mackenzie's Spray. It is to be hoped some substitute for Formalin will shortly be brought out, as to use it in a 2 per cent. solution, which is desirable, often makes the work of the men unbearably irritating.

A disinfector for the use of books has been provided during the year. They are disinfected in a closed chamber by burning Formalin tablets.

SECTION III.



Schools.

SUMMARY OF INFECTIOUS DISEASES REPORTED IN CONNECTION WITH SCHOOLS FOR THE YEAR ENDED
31st DECEMBER, 1904.

SCHOOLS.	No. of Scholars on Roll.	DISEASE.													
		Small Pox.	Scarlet Fever.	Diphtheria.	Membranous Group.	Typhoid Fever.	Continued Fever.	Measles.	German Measles.	Chicken Pox.	Mumps.	Whooping Cough.	Ringworm.	Glass Pox.	TOTAL.
Downshall.....	1,632	...	31	7	1	3	...	248	23	4	1	9	16	..	343
Loxford	1,484	...	12	14	1	2	1	170	...	14	3	8	1	..	226
Christchurch Road.....	1,223	...	14	9	2	2	..	136	6	9	..	13	2	..	193
Cleveland Road	1,626	...	34	16	...	1	...	176	13	27	...	21	8	..	296
Highlands	641	...	8	25	...	...	...	31	1	28	2	13	6	3	117
National, Ilford	522	...	8	1	1	1	...	33	2	...	...	1	...	..	47
Chadwell	508	...	22	2	...	...	...	7	8	1	...	2	2	..	44
National, Barkingside.....	290	...	1	1	...	...	...	54	...	3	...	1	1	..	61
Infants', High Road	153	...	2	1	1	...	...	62	2	1	...	...	...	..	69
Horns	439	...	2	...	...	...	...	99	2	4	1	...	...	..	108
Roman Catholic	215	...	1	1	...	...	...	13	...	1	...	2	1	..	19
Secondary	...	...	...	4	...	2	...	3	...	1	...	...	...	..	10
Beehive	107	...	1	...	...	...	...	9	...	4	...	1	...	..	15
Ilford Lane	67	...	2	...	...	...	...	7	...	...	...	2	...	..	11
Aldborough Hatch	93	...	1	1	...	...	...	...	...	2	...	...	...	..	4
TOTALS ...	9,000	...	139	82	6	11	1	1 048	57	99	7	73	37	3	1,563

SCARLET FEVER heads the list of notifiable diseases.

On three separate occasions I have excluded children from school, who were in the peeling stage of Scarlet Fever.

It is very easy for a child to be absent from school for a few days with sore throat, and perhaps the parent never notices a rash. The child apparently recovers, is sent back to school, and later, perhaps, begins to peel. In each of the three instances recorded above, no further case occurred in those particular class-rooms within one month. It is rather curious that such was the case, and perhaps aids the belief that Scarlet Fever is more infectious in an early stage, or when a convalescent attends school with some discharge from the nose or ears. So that it is evident how careful teachers want to be in all cases of sore throat; not only in excluding such children from school, but in keeping them under observation after they have been absent for a few days with a history of sore throat.

For, although there was no case apparently, following the three mentioned above, it does not follow that another time we should be so fortunate. For no disease appears to vary so much in its infectivity as Scarlet Fever. At one time, as above, it appears to be harmless; at another it spreads with persistent virulence.

DIPHTHERIA is the other notifiable disease which has been present during the year.

As regards school infection, there are three ways in which this disease is spread.

(1) Healthy children who have been in contact with a case of Diphtheria, and who carry infection to another child.

(2) Mild cases of Diphtheria, which are not bad enough to be kept away from school, or only for a few days, while the worst symptoms disappear. So that they attend school in an infectious condition.

(3) Cases of Diphtheria which, after being treated, return to school without the noses and throats having been examined bacteriologically, and found free from infection.

Diphtheria has in recent years become much more prevalent in Urban Districts, especially since 1875; and as it generally occurs at school age, the probability is that the attendance at school has something to do with this prevalence. So that, as Ilford becomes still more Urban, the probabilities are that this disease will become more rife. If that is so, it will be necessary to provide means for examining bacteriologically the noses and throats of children who are likely to contain infection, but show no certain signs to the naked eye.

Of the non-notifiable diseases, MEASLES is the one that has most disastrously affected the attendance during the year. Barkingside and Cleveland Road Infants' Schools were closed in December, for three weeks each, which merely made an extension of the holidays.

Measles is about the only disease which now requires school closure. Owing to the fact that it is infectious for three days or so before the rash appears, the classroom is infected before the disease is recognised.

The following are the points to be borne in mind in advising closure :—

(1) THE MORTALITY.—Time of year and condition of the weather have a great influence on this, and also the class of children.

(2) THE SPREAD OF THE DISEASE.—In one school, the High Road Infants, a very large proportion, nearly one-third, was notified in two days. So that I thought closure was useless in this case ; and so it proved, as only those children were affected, who had already been infected when the information was first received.

(3) THE INTERFERENCE WITH THE EDUCATION OF THE NON-AFFECTED CHILDREN.—Hence school closure is a much more drastic method in the middle of a term than at the end.

(4) THE LOSS OF GRANT.—This is an element which is apt to be exaggerated, but it seems a pity that Article 101 has been abolished by the Board of Education, as now there is no compensation to the Council if a school is not closed.

The question of the inclusion of Measles under the Notification of Infectious Diseases Act is dealt with on page 48.

What is very essential to know with regard to Measles in a school, is the proportion of susceptible children ; for, obviously, the greater the proportion of susceptible children, the greater is the need for school closure. Of the 1,048 cases of Measles of which we have received notice, 757 were in infants' schools.

I should suggest that a series of cards be printed, one for each child, to be filled up by the teacher, on the admission of a new child to the infants' schools. The mother generally brings her child to school on admission, so that there would be no difficulty in obtaining the Measles history of the child ; and in a short time a fairly accurate record would be obtained of the number of children in the school, who have had Measles.

Also, too, an addition to the staff of Attendance Officers is urgently required, as the early notice of Measles and other diseases, depends largely on these officers; and they are unable to cope with the work as at present staffed.

If Attendance Officers are of use in securing attendance at school, sufficient of these officers should be provided to carry out the work thoroughly, so that one could attend each school daily and follow up at once any absentees. By securing improved attendance grants, any increase in cost should be compensated for. Half measures are always expensive. Certainly it would be a benefit from a disease prevention point of view.

CHICKEN POX, MUMPS, and WHOOPING COUGH, have given rise to no trouble worth mentioning, during the year, as regards attendance.

RINGWORM is an exceedingly troublesome disease to deal with, as it is impossible to make the parent take any trouble to cure the child if there is no anxiety to secure the educational benefit. The only thing is to exclude the child from school until the infection has disappeared.

This often involves months of absence from school, sometimes even when the parent is making every effort to get the child well. It is most important that no child should be allowed to return to school until absolutely all infection has ceased; if necessary, to be proved so on bacteriological examination.

In a report presented to the Education Committee the following preventive measures were recommended :—

(1) In building all new schools ample peg accommodation over and above the statutory requirements should be provided.

(2) The practice of children keeping their caps in their pockets or under their coats while in school should be encouraged.

(3) Clean towels should be provided as often as necessary ; certainly more often than once a week.

(4) No child should be re-admitted after he has been away from school with ringworm, until he has received a certificate from the Medical Officer of Health that he is fit to do so, or from his Medical Attendant.

(5) All teachers should carefully inspect their children.

(6) Any doubtful case should be referred to the Medical Officer of Health at once, for examination and decision.

By these means, the prevalence of this disease should diminish.

A pamphlet on “Hints and Regulations regarding Infectious Diseases” has been drawn up, printed, and supplied to all the Head and certificated teachers in the Council’s Schools, during the year, and the following extract shows how these diseases are dealt with :—

“If any child shows symptoms of any of the above diseases, or comes from a house where such disease is known to exist, it must be dealt with in the following manner :—

1. When no notice has been received from the Medical Officer of Health, the Head-Teacher must at once :—

(a) Send the affected child home ;

(b) Send the name and address of the child to the Medical Officer of Health with the reason for its exclusion on the form provided for the purpose.

2. When a notice has been received from the Medical Officer of Health, the Head-Teacher must:—

- (a) Exclude the affected child and follow instructions with regard to other children from the same house ;
- (b) Send this notice to the Head-Teachers of the other departments of the school who should date, initial, and return it to the Head-Teacher."

A table is given as a guide for the shortest length of time for which children suffering from the various diseases must be excluded from school ; but, as all these diseases must be reported to the Medical Officer of Health, a notice will always be sent from him, specifying the time it is imperative for the affected child to be excluded from school ; and also, if necessary, any other children from the same house."

"In certain cases where there are children in the same house who have previously suffered from Measles and are over eight years of age, certificates will be granted by the Medical Officer of Health for these children to attend school. The granting of these certificates will depend on whether the arrangements for the isolation and nursing of the patient are satisfactory or not."

During the past year 1,518 certificates have been given to school children suffering from minor troubles who have been seen by me at the Town Hall.

VISION.—A great many children have had their vision tested during the year. Of these, a certain proportion have taken the trouble to attend a Hospital and obtain glasses. Unfortunately I have no record of the exact number, but certainly the proportion is small. The reasons are various, sometimes poverty, sometimes inability to realise the importance of the matter. Some children have been much benefited by the help afforded.

VENTILATION.—Ventilation of schools is a most important matter. On the whole this is distinctly good in the Council's schools, as most of the buildings are new, and there is a continuous improvement in the newer ones. In one or two of the older schools there is room for improvement; and I trust this will be effected before long. Natural Ventilation is used in all the schools, so the efficiency varies with the teacher, and that teacher's appreciation of the value of fresh air during school hours.

The caretakers are instructed to thoroughly air their schools night and morning.

DESKS.—All the newer schools are provided with dual desks. Of course, when there is any infectious disease about, the close contact of two children is undoubtedly a help in spreading it. Still more so, when three children are put into a dual desk for some lessons.

Some form of desk with single pedestal seats would probably be more satisfactory.

THE HYGIENIC CERTIFICATE FOR TEACHERS has attracted a good deal of notice during the year, and an important deputation waited on the Board of Education, with a view of making this compulsory for all teachers. It is certainly desirable that every head-teacher should possess one. The importance of maintaining proper ventilation, heating and lighting, of the schools under their charge, the detection of early cases of disease, signs of overstrain, or mental defect amongst the children, and in general, all departures from the normal, require that the teacher should possess the necessary knowledge. I am glad to say most of the teachers under the Council possess this certificate; and I have often been struck

with their care and knowledge on these various matters. It is an important matter, and should be made compulsory for all teachers, so as to bring them up to one uniform standard in this respect.

The health of a School depends a great deal on the knowledge and care of the head teacher; and unless the children's health is maintained, it is impossible to get the best results from an educational point of view.

NEW SCHOOLS.—Two new schools have been opened during the year providing accommodation for 880 children at The Horns, and for 880 children at the Loxford Schools. Another school is nearing completion in the Highlands which will accommodate 1540 children.



SECTION IV.

Sanitary Administration.

MILK SUPPLY.

COWSHEDS AND DAIRIES.—An outbreak of Diphtheria in June last, which appeared to be due to the milk infected at the farm, induced the Council to sanction the inspection of all farms supplying milk to Ilford. The dairymen willingly gave their support, thus enabling a register to be kept and revised periodically, of all farmers supplying milk to the various dairymen.

A great many of these farms have now been visited, the water supply of one has been improved, the drainage of another cowshed has been renewed, and the milk from another farm has been stopped coming into Ilford, where the water for cooling purposes was useless. In all there are some 30 farms supplying Ilford with milk, and scattered over East Anglia. The Sections of the recent Ilford Act applying to these farmers have been printed, and a copy sent to each one.

Informally a certain amount of good can be done by these inspections, as I have found the farmers very willing to assist and adopt any reasonable suggestions. At first I thought that those dairymen should be advertised with their farmers who were willing to adopt this inspection. As, however, the dairymen almost universally fell in with the suggestions, there was no necessity to advertise, with the idea of bringing the others into line; and if one advertises them as having been inspected and found satisfactory, it is adopting a responsibility which is undesirable, unless an advantage is to be gained which more than counterbalances this drawback. The fact is, there are a large number of farms which are well managed, but where in several particulars they fall short of a desirable standard.

These defects perhaps require an expenditure of capital to remedy, which owing to the terms of a lease or other handicap, it is impossible for the farmer to remedy at present.

Thus it would be unfair to the farmer to refuse to register him, and equally unfair to the consumer to assume responsibility for the farm being up to a desirable standard.

The following rules were drawn up as a standard for the dairy farmers to act up to.

REGISTRATION OF DAIRY FARMS.

A dairy farmer supplying milk to Ilford must comply with the following rules if he wishes to be registered.

(1) The farmer must at once isolate and notify to the Medical Officer of Health, Ilford, any infectious disease occurring either in his own house or in the house of any of his employees. He must then take such precautions as the Medical Officer advises for the protection of the milk against infection.

(2) The milkers must wash their hands thoroughly before milking and should also rinse the hands in water after milking each cow.

(3) The udders and teats of the cow must be cleaned before milking.

(4) The milk must not remain in the cowshed a moment longer than is absolutely necessary, and must be at once strained and cooled.

(5) No milk to be stored in a dwelling room.

(6) The cows must be kept as clean as possible.

(7) No cow's milk to be sold immediately after calving, or for the first four days.

(8) No milk to be supplied from cows whose udders are not in a perfectly healthy condition, and if there is anything suspicious the Medical Officer of Health must be at once informed of it.

(9) All churns, pails, and utensils used in connection with the milk must be kept perfectly clean.

(10) Milk carts must never be used for carriage of dung, or any other offensive material, and they must be kept thoroughly clean.

(11) The cowsheds must be kept as clean as possible, whitewashed every six months, well ventilated and lighted.

(12) The water supply must be to the satisfaction of the Medical Officer of Health.

I should like to express my thanks to Dr. Dunbar, Medical Officer of Health, Torquay, for his help in this connection, as this plan follows on the lines adopted in that Borough, with certain modifications.

The question of the milk supply of a Town is at present full of difficulty, but, if this inspection does nothing more than give the Council a knowledge of the weak spots in its supply, it will be justified.

In the new Ilford Urban District Council Act clauses with regard to milk have been obtained on the following points:—

(1) Dairymen to notify infectious diseases among their servants. (Sec. 19).

(2) Medical Officer may require dairymen to furnish list of sources of their supply of milk and of the persons supplied. (Sec. 20).

(3) Compensation to Dairymen for stopping their milk supply. (Sec. 21).

(4) Penalty for selling milk of diseased cows. (Sec. 30.)

(5) Penalty on failing to isolate diseased cows. (Sec. 31.)

(6) Obligation to notify cases of tuberculosis. (Sec. 32.)

(7) Power to take samples of milk, both within and also without the district, on obtaining Magistrate's order. (Sec. 33.)

(8) Power to inspect cows, and to take samples of milk suspected to be the cause of tuberculosis, either within or without the district. (Sec. 34.)

(9) Dairymen may appeal against an order of the Council, either to a Petty Sessional Court, or to the Board of Agriculture. (Sec. 35.)

(10) Compensation to Dairymen. (Sec. 36.)

Some of these sections it will be noticed give the Medical Officer of Health power to inspect cows, and take samples, in certain contingencies, from cowsheds outside the district. The bulk of the milk supply of this district is obtained from cow-keepers outside the district; so that to limit the powers to the district itself would be of little use, unless some general legislation brings the standard of cowsheds in other districts to some sort of general satisfactory level.

Many farmers are careful to take means to supply a satisfactory milk, but others, I am afraid, are careless, and do not appreciate the importance of cleanliness and care.

Until the public appreciate the importance of a clean milk supply, so long will the purveyors not take the care they should do in preserving their milk. Nevertheless, it is very necessary for the Sanitary Authority to do all they can in seeing that their population is supplied with as good a milk as possible.

COWSHEDS.

There are seven Cowsheds registered in the district. Four of these are built up to the required standard. One old Cowshed has been replaced by a new one.

MILK-SHOPS AND DAIRIES.

There are forty-two on the register. Two new ones have been opened during the year. With an increase in the sanitary staff these places should be inspected with frequent regularity.

MEAT SUPPLY.

This is nearly all obtained from the Central Market at Smithfield; but there are four slaughter-houses—three of which were licensed during the year—in which a few beasts, and more sheep and pigs are killed. One is satisfactory, the others are not so good, but are periodically inspected. An application for a new licence was made during the year, and granted by the Council, subject to certain alterations. The ground landlord interfered, however, and nothing has been done.

VEGETABLE AND FRUIT SHOPS.

These have been frequently inspected.

FISH SHOPS.

These have been inspected. One that was used for frying fish has had certain alterations made, as the hood and flue were not sufficient for carrying off the fumes of the frying fish. One-and-a-half barrels of herrings were condemned during the year.

OFFENSIVE TRADES.

There are none in the district.

FACTORIES.

The duties of Sanitary Authorities with regard to factories are not extensive, and are practically limited to supervision with regard to provision of means of escape in case of fire, and also of sufficient sanitary conveniences.

The following is a list of the factories in the district :—

Laundries (Steam)	6
Saw Mills and Joinery Works	5
„ „ Wheel Works	1
Brush and Veneer Cutter	1
Printers	4
Engineers	1
Granary	1
Chemical Works	2
Photographic Plate Works, etc. ...	1
Paper Mill	1
Carriage Works... ..	3
Gas Works... ..	1
Electric Light Works	1
Celluloid Collar Works	1
Brickfields	3
Furniture Makers	1
	—
Total	33
	—

WORKSHOPS AND WORKPLACES.

Under the Factory and Workshops Act, 1901, each Local Authority is obliged to keep a register of Workshops and Workplaces, and to forward to other Authorities the addresses of outworkers employed by masters in their district, but who reside in other districts.

The Medical Officer of Health is required to report to the Home Office and the Local Government Board on the administration of the Act in their district during the preceding year, with regard to :—

- (a) Cleanliness.
- (b) Air space.
- (c) Ventilation.

(d) Drainage on floors on which wet processes are carried on.

(e) Provision of suitable and sufficient sanitary conveniences.

Two hundred and sixty one have been inspected during the year.

They are :—

Dressmakers	...	...	...	72
Milliners	...	...	...	23
Tailors	...	...	..	12
Bootmakers and Repairers	...	...	...	51
Saddlers and Harness Makers	...	...	...	5
Laundries (Hand)	...	...	...	10
Smiths	...	...	...	9
Cycle Makers and Repairers	..	...	...	10
Motor Maker and Repairer...	...	...	...	1
Stonemasons	...	...	...	6
Picture Framers	...	...	...	4
Upholsterers	...	...	...	4
Surgical Belt Makers	...	...	...	2
Watch and Clock Repairers	...	...	...	6
Glass Cutter	...	...	...	1
Electrical Fitters	...	...	...	2
Umbrella Repairers...	...	...	...	3
Undertakers	...	...	...	7
Carpenters and Joiners	...	...	...	13
Carriage Builders and Wheelwrights	...	...	...	5
Plumbers	...	...	...	3
Dentists	...	...	...	2
Printers	...	...	...	2
Feather Dressers	...	...	...	3
Lace Workers	...	...	...	2
Basket Maker	...	...	...	1
Signwriter	...	...	...	1
Domestic Machinist...	...	...	...	1
Total	...	...	...	261

FACTORIES, WORKSHOPS, LAUNDRIES,
WORKPLACES AND HOMEWORK.

1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR
INSPECTORS OF NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (including Factory Laundries)	63	Nil.	Nil.
Workshops (including Workshop Laundries) ...	385	3	Nil.
Workplaces... ..	12	Nil.	Nil.
Homeworkers' Premises ...	26	Nil.	Nil.
Total	486	3	Nil.

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :—</i>				
Want of cleanliness	1	1		
Want of ventilation... ..				
Overcrowding	1	1		
Want of drainage of floors ...	1			
Other nuisances	1	Premises closed		
Sanitary accom- modations { insufficient ... { unsuitable or { defective... { not separate { for sexes...				
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of underground bakehouses (S. 101)				
Breach of special sanitary require- ments for bakehouses (SS. 97 to 100)				
Failure as regard lists of outworkers (S. 107)	12	12		
Giving out work { unwholesome to be done (S. 108) in premises { infected (S. 110) which are ...				
Allowing wearing apparel to be made in premises infected by scarlet fever or small pox (S. 109)				
Other offences				
Total	16	14		

3.—OTHER MATTERS.

Class.	Number.	
Matters notified to H.M. Inspectors of Factories :—		
Failure to affix Abstract of the Factory and Workshop Act (S. 133)	12	
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act(S. 5) {	Notified by H.M. Inspector ...	
Other	Reports (of action taken) sent to H.M. Inspectors	
Underground Bakehouses (S. 101) :—		
In use during 1903	2	
Certificates granted { in 1903	1	
In use at the end of 1904	1	
Homework :—	Number of	
<i>Lists of Outworkers</i> (S. 107) :—	Lists.	Outworkers.
Lists received	22	46
Addresses of { forwarded to other Authorities	66	
outworkers { received from other Authorities	26	
<i>Homework in unwholesome or infected premises</i>	Wearing Apparel;	Other.
Notices prohibiting homework in unwholesome premises (S. 108)	1	
Cases of infectious disease notified in homeworkers' premises		
Orders prohibiting homework in infected premises (S. 110, ...		
Workshops on the Register (S. 131) at the end of 1904.		
Bakehouses (Workshops)	32	
Total number of workshops on Register ...	293	

For 1903 there were 250 on the register.

3 notices were sent under the Public Health Act, and one was complied with, one workshop has gone out of occupation, and the other notice has not been complied with.

Notices of outworkers residing in this district were received in 26 instances from other Authorities. A record is kept of their addresses. Notices of outworkers residing in other districts were sent in 66 instances.

A list of outworkers supplied by 11 employers was kept; 12 notices were sent to the Factory Inspector, where young persons were employed and no abstract of the Act was posted.

There are several small laundries in the district, worked by members of one family, which are, of course, outside the scope of the Factory Act; but in any fresh Act they should be brought in.

BAKEHOUSES.

There are 32 bakehouses in the district, being an increase of 4 over last year.

There were 2 underground bakehouses in the district in 1903. One has been closed, and a new one built above the ground. The other has been altered, so as to meet the requirements of the Council as regards light, ventilation, and in other respects.

Frequent inspections have been made, and are required, to keep some of them in a reasonably suitable condition.

WATER SUPPLY.

The district is supplied by the East London Water Company on all that portion north of the Cranbrook Road, and including Fencepiece. Analysis has given satisfactory results.

The other portion of the district is supplied by the South Essex Water Company. This water has given a much better result on analysis, than has occurred before. This company is sinking a well in the Roding Valley in this district.

REMOVAL OF HOUSE-REFUSE.

Collection is made once a week throughout the whole district, and is carried out by the Council.

Previous to 1901 this work was carried out by contractors; but in that year part of the district was scavenged by the Council themselves, and as it was found possible to do it more efficiently and cheaply than it was done under the contract system in 1902, the Council decided to take the whole district.

It is under the direction of the Sanitary Inspector, and is carried out very efficiently,

The refuse is taken to the brickfields.

Most of the dustbins are portable ones, and supervision is exercised to see that suitable receptacles are used and kept in order.

In the new Ilford Urban District Council Act a clause has been obtained as to the regulation of provision of dustbins.

SEWAGE WORKS.

Good progress has been made with the extension of the Sewage Works during the year.

Two new grit chambers have been provided, and two screens similar to those already in use.

Two open septic tanks have been laid down of the capacity of 950,000 gallons each; and the old settling tanks have been knocked into one, making another open septic tank of 600,000 gallons capacity. Making in all a capacity of 25,000,000 gallons. Also a storm roughing filter of an area of 1,178 yards has been laid down, made of clinker, three feet in depth.

Two-and-a-half acres of contact beds have been started, and split up into ten beds. These will be filled with coke breeze five feet in depth, and of such a size as to pass through a screen excluding all above two inches, and all below one inch.

The effluent passes from the works to empty into the river Thames below Barking Creek.

SECTION V.

*Report of
Sanitary Inspector.*

Report of Sanitary Inspector.

PUBLIC HEALTH DEPARTMENT,

COUNCIL OFFICES,

ILFORD,

13th March, 1905.

To the Chairman and Members

of the Ilford Urban District Council.

GENTLEMEN,

I have the honor to submit to you, herewith, my Twelfth Annual Report; and in doing so, desire to express my appreciation of the kindness and support I have received from the Public Health Committee.

I am much indebted to Mr. Monkcom for the valuable assistance received from him. He has faithfully and satisfactorily carried out his duties as my assistant. I also appreciate and desire to acknowledge the kind co-operation of the other officials.

I am, Gentlemen, .

Your obedient Servant,

F. W. KING,

Sanitary Inspector.

NUISANCES.

For the detection and abatement of nuisances, the district has been systematically inspected, especially in the localities where they are likely to exist and recur. As the result, the following work was carried out :—

DRAINAGE.

Drains cleansed ...	...	...	...	...	315
Do. repaired or relaid	...	...	...	...	74
W. C. pans and traps provided	...	...	...	...	59
Flushing cisterns to W. C.'s repaired or provided	...	...	...	...	78
Soilpipes repaired or renewed	...	...	...	...	10
Ventilating shafts repaired or provided	...	...	...	...	25
Cesspits and privies abolished	...	...	...	...	14
Do. repaired	...	...	...	...	7
W. C. floors cemented	...	...	...	...	48
Rain-water pipes disconnected from drains	...	...	...	...	8
Ditches cleansed	...	...	...	...	5
Water laid on to closets	...	...	...	...	9
Premises connected with main sewer	...	...	...	...	30
Sink-waste-pipes provided and repaired	...	...	...	...	15
Do. do. disconnected from drain	...	...	...	...	1
Yards drained	...	...	...	...	9
Manhole covers fitted	...	...	...	...	12
Soil and slop drains disconnected from water-course	...	...	...	...	30
Earth closets provided	...	...	...	...	3
Manure pit drained	...	...	...	...	1
Cesspits emptied and cleansed	...	...	...	...	26
Total					781

DEFECTS IN DWELLING HOUSES.

Roofs repaired	13
Yard paving repaired	31
Rain-water spouts repaired or provided ...	19
Flooring repaired	12
Water laid on	15
Houses or parts of houses cleansed	13
Urinals cleansed	2
Do. removed	1
Overcrowding abated	4
Yards cleansed	7
Dilapidated houses repaired	6
Basements ventilated	4
Wells closed	2
Well filled in	1
Basements drained	7

Ilford Improvement Acts.

Yards paved	27
Galvanized iron dustbins provided	89

Bye-laws.

Water storage cisterns cleansed	93
Do. do. do. covered	59
Total	<u>405</u>

ACCUMULATIONS OF REFUSE, &c.

Manure removed	11
Fish offal removed	3
Refuse removed... ..	17
Manure pit provided	1
Stagnant water removed from basements ...	40
Total	<u>72</u>

GENERALLY.

Animals (improperly kept) removed ...	...	16
Smoke loft demolished ...	...	1
Smoke nuisances abated ...	...	5
Roadway and rearway paved and drained ...	...	1
Total ...		23

NOTICES SERVED.

Notices.	Served 1904.	Complied with, 1904.	Outstanding January, 1905.
Notices outstanding previous to 1904...	30	...	...
Statutory ...	22	23	14
Preliminary ...	203	251	20
Do. (by letter)...	60		
Pave yard. (Ilford Improvement Act)	16	16	5
Cleanse cistern. (Bye-laws) ...	76	72	4
Cover cistern (Do.) ...	40	36	4
Lay on water to dwelling-house ...	2	2	1
Cleanse dwelling house ...	7	7	...
Workshop ...	2	1	2
Totals ...	458	408	50

Where a nuisance is found, the procedure is to call the attention of the owner or occupier (as the case may be) to the fact by letter or preliminary notice. If no action is taken, the matter is brought before the Committee, and, if necessary, they recommend to the Council that a statutory notice be served; and if not complied with within the time stated, legal proceedings to be taken.

As you will see under the heading "Notices Served" very few statutory notices were issued. Most of the work mentioned in the above statement was executed, upon the owner or occupier receiving either a letter or preliminary notice, calling attention to the particular defect or breach of bye-laws, and stating the remedial measures required to be carried out.

I find most owners of property willing to carry out my requirements, provided I can convince them they are not unreasonable. This is borne out by the fact that no legal proceedings had to be taken during the year, to enforce compliance with a notice.

SUMMARY OF VISITS AS ENTERED IN JOURNAL DURING THE YEAR ENDED 31st DEC., 1904.

Houses and premises inspected	...	...	2146
Do. do. do. during			
progress of work	...	...	1717
Nuisances detected	...	...	687
Do. abated	...	...	653
Do. unabated	...	...	34
Complaints received	...	...	148
Houses disinfected	...	...	372
Articles do.	...	...	4257
Summonses taken out	...	...	—

REMOVAL OF HOUSE REFUSE.

The removal of house refuse during the year ended the 31st December, I consider, has been carried out most satisfactorily as regards efficiency and cost. Very few complaints were received, and these upon investigation were found to be caused through no fault of the men, but to the fact that no person was at home at the time they called at the

house, or owing to receiving no answer. In other cases, new residents coming into the district appeared to have the impression that the refuse should be collected daily, and were not cognizant that we collected weekly, visiting each part of the district on a particular day.

The quantity of house refuse collected during the year was 10,072 van loads; the capacity of the vans being 3 cubic yards. This quantity represents about 13,600 tons.

The number of horses and vans engaged in the collection was 2,681. The number of days upon which collections took place was 307.

No collection is made on public holidays. Therefore, to obviate missing the houses for a week, in the district visited in the ordinary way upon the day which happens to be a public holiday, it is, where necessary, divided, and the collection made in a portion, on a day prior to the holiday, and the remainder the day following the holiday.

The average number of horses engaged per day was 8.73, and the average number of loads of refuse removed per horse per day was 3.75.

Seven of the vans were thoroughly overhauled, repaired, and painted.

The total cost of collection (including all charges) amounted to £2,150 3s. 8d. This gives a cost of 3.16 shillings per ton. Taking the number of occupied houses as 11,045, the cost of collection per house per week was 0.89 of a penny.

DISPOSAL OF HOUSE REFUSE.

As in former years most of the refuse has been carted to the brickfield. Here it is piled in large heaps, and there it remains in a more or less state of decomposition, until reduced to a condition that it can be broken down and sifted.

The fine siftings are mixed with the clay used for making bricks, and the cinders are used for burning the bricks. The coarser material is then thrown into the holes from where the clay to make the bricks was dug out, and for the purpose of levelling up to form what in a few years may be offered as a "desirable building site."

A large quantity was also tipped into a "worked out" brickfield, to form a portion of the yard of the Council's Depot.

Many complaints were received from residents living near to the brickfield, of the smell arising from the decomposing refuse; and also from the nuisance caused by the common house-fly. I visited many of the houses where the complainants lived, and I regret to state that the spectacle witnessed was most disgusting. Not only were the walls and ceilings covered with fly marks, but also the domestic utensils. It appeared almost impossible to keep the food free from flies; and where it was exposed they were immediately crawling over it. Therefore, one cannot but sympathise with those who have to live in the vicinity where refuse is deposited.

Many of the business men in the district, especially the greengrocers, have a great difficulty in making arrangements for the removal of their trade refuse. Although under the Ilford Urban District Council Act 1904, the Council have power to collect it and charge for doing so, the difficulty of disposal arises.

It must, therefore, be apparent from the facts I have stated, that a destructor must soon be erected, and with all deference to what has been written and said against the costliness of the working of them, I am still convinced that if every detail is carefully taken into consideration before destructors are erected, with the object in view of utilising the gases for generating power, they can be worked so as not to be an undue charge upon the rates.

Whether a destructor is built or not, it is evident that some other method must be found in the near future, for the disposing of house-refuse so as not to be a nuisance.

GIPSIES AND TENT DWELLERS.

These people again caused considerable trouble, and the assistance of the police was frequently required for the purpose of removing them. Upon one occasion there was an encampment off Gordon Road, numbering over 40 vans, and several times there were 15 to 20 vans and tents. The greatest trouble however, was given by people occupying 4 or 5 vans, who are always more or less in the district, and have to be continually moved from place to place.

On the last day of the year we had a visit from the so called Macedonian Gipsies, and one van was located in Albert Road, for about 12 hours owing to a broken wheel. We had a wheel fitted to the van, and I think we were fortunate in getting rid of them so cheaply. The van, and the occupants themselves, numbering 14, were in a filthy condition.

PERIODICAL INSPECTIONS.

1. COWSHEDS (7). All these have been visited, and on the whole they have been kept in a satisfactory condition. The sheds where the largest number of cows are kept are very fair buildings, being well drained and ventilated.

2. DAIRIES AND MILKSHOPS (42). These have been carefully looked after, especially as regards the cleanliness of the vessels, and accommodation for storing the milk under suitable conditions.

In two cases drains inside dairies were removed.

3. BAKEHOUSES (32). The bakehouses have been inspected, and generally found satisfactory as regards cleanliness.

4. WORKSHOPS (261). These were visited, and as necessity arose, the rooms were measured to ascertain the amount of air-space. One case of overcrowding was detected and abated. Attention was also given to the sanitary accommodation.

5. SLAUGHTER-HOUSES (4). Only three however, were licensed during the past year. One is a modern building, the other two buildings are not quite in accordance with the model bye-laws. By being carefully looked after, however they are satisfactorily kept as regards cleanliness.

COMPLAINTS.

The number of complaints received was 148, and included 63 respecting drains being choked; 20 respecting sanitary defects; 16 arising from accumulations of filth, carcasses, &c., and 11 respecting the keeping of fowls and animals.

All the complaints were investigated, and, where possible, necessary action taken.

INSPECTION OF FOOD.

During the year frequent visits were made to the various shops, and large quantities of food have been inspected.

No seizures of unsound food were made. One-and-a-half barrels of herrings and one piece of mutton were brought to the office, found to be unfit for food and were destroyed.

WATER SUPPLY.

In the early part of the year numerous and frequent complaints were received of the shortage of water in a portion of the district supplied by the S.E.W.W. Co.

Samples of water from two wells were taken and submitted to Dr. Thresh for analysis. Both samples were certified to be unfit for domestic purposes, and the wells were closed.

INFECTIOUS DISEASES.

Nearly all the houses in which infectious diseases occurred, were visited, the sanitary arrangements and surroundings being carefully inspected, for the purpose of ascertaining whether any defects or nuisance existed. Seventeen rooms were cleansed by stripping the paper from the walls, white-washing the ceilings &c., after notice or letter to the owners.

ILFORD URBAN DISTRICT COUNCIL ACT, 1904.

In this Act several important sanitary provisions were obtained. I wish to call attention to the following :—

SECTION 43 :—“ Soilpipes of water-closets within houses and buildings shall be ventilated by means of a pipe of “suitable” material carried up therefrom or by such other method as the Council shall direct.”

The matter of “suitable” material for the ventilating shaft has not yet been considered. I think you ought to do so at once, and make a regulation to prevent light zinc pipes with banded joints being used.

SECTION 44 :— Provides for regulation dustbins.

The Council considered this matter and adopted a regulation that the dustbin be constructed of galvanized iron, circular shape, size 24 ins. by 18 ins., and fitted with a cover and handles.

SECTION 45 :— Enables the Council to remove and dispose of trade and other refuse, and make a reasonable charge for doing so.

This matter was considered by the Public Health Committee, but left in abeyance owing to the difficulty of disposal, at the present time, of certain kinds of trade-refuse

